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**ACN 07398**

**Unit Ministry Team  
Communication And Transportation Requirements  
On The Airland Battlefield**

**FINAL REPORT**

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ELECTE  
MAY 25 1994  
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**DEPARTMENT OF THE ARMY  
UNITED STATES ARMY CHAPLAIN CENTER AND SCHOOL  
FORT MONMOUTH, NEW JERSEY 07703-5612**

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UNIT MINISTRY TEAM COMMUNICATION AND TRANSPORTATION  
REQUIREMENTS ON THE AIRLAND BATTLEFIELD

ACN 07398

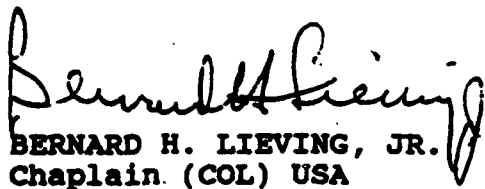
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## **SPECIAL NOTE**

### **AR 5-5 STUDY UMT COMMUNICATION AND TRANSPORTATION REQUIREMENTS ON THE AIRLAND BATTLEFIELD**

The Executive Summary and Chapter 7, Conclusions and Recommendations, remain as they were revised by SFC Perez-Aponte in the fall of 1992. However, Chaplain (LTC) Richard Whaley, Chief of Organization and Materiel, Directorate of Combat Developments, USACHCS states (May 93) that, "Where authorized on the TOE, the UMT vehicle is now listed as a mission rather than a staff vehicle."

## NOTICES

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## DISCLAIMER

The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

The word "he", "him", "his", "man", and "men" when used in this publication, represent both the masculine and feminine genders unless otherwise specifically stated.

## **ACKNOWLEDGMENTS**

US Army Soldier Support Center, Fort Benjamin Harrison, sponsored this study. Assistance was provided by the TRACOC Analysis Command at Ft. Benjamin Harrison (TRAC-FBHN).

US Army Chaplain Center and School initiated and conducted this study. The Study Director, Chaplain (LTC) Larry A. Walker and chaplain assistants assigned to the Directorate of Combat Developments, USACHCS, Fort Monmouth, NJ collected the data and analyzed it in consultation with the Study Advisory Group.

SFC Joaquin Perez-Aponte, Concepts and Studies Division, Directorate of Combat Developments, USACHCS, Fort Monmouth, NJ conducted this study.

The Study Advisory Group included: Chaplain (COL) John Hannah, Chaplain (LTC) Gilbert Pingel, Chaplain (LTC) Richard Whaley, Chaplain (LTC) Larry Walker, Chaplain (MAJ) Greg Hill, Mr. Jan Moran (CECOM), Mr. Martin Walker (TRAC-FBHN), SFC Woodard, and SFC Perez-Aponte.

The 4th Infantry Division UMTs, Fort Carson, Colorado, coordinated and executed the field experiment.

This document was staffed with various Subject Matter Experts (SME) and military agencies including: Soldier Support Center (SSC), Combined Arms Support Command (CASCOC), Communications and Electronics Command (CECOM), Department of the Army Chief of Chaplain's Office (DACH), and the US Army Center & School (USACHCS).

### SECURITY CHECKLIST

1. TITLE OF STUDY: Unit Ministry Team Communication and Transportation Requirements on the Airland Battlefield.
2. This report is unclassified.
3. Limitations on dissemination have not been imposed.

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## ACRONYMS AND DEFINITIONS

ALB	AirLand Battlefield
ALO	AirLand Operations
ACUS	Area Common-User System
BAS	Battlefield Automation System
BDP	Battlefield Development Plan
CALL	Center for Army Lessons Learned
CASCOM	Combined Arms Support Command
CDB	Communication Data Base
CECOM	Communications and Electronic Command
COSCOM	Corps Support Command
CUCV	Commercial Utility Cargo Vehicle
DISCOM	Division Support Command
DNVT	Digital Non-secured Voice Terminal
EEA	Essential Element of Analysis
EPLRS	Enhanced Position Location Reporting System
ERC	Equipment Readiness Code
FM	Frequency Modulated
GRS	General Religious Support
HF	High Frequency
HMMWV	High Mobility Multipurpose Wheeled Vehicle
LOS	Line of Sight
METL	Mission Essential Task List
MSC	Major Subordinate Command
MSE	Mobile Subscriber Equipment

MSRT	Mobile Subscriber Radiotelephone Terminal
MTOE	Modified Table of Equipment
NTC	National Training Center
OPFAC	Operation Facility
RVN	Republic of Vietnam
SINGGAR	Single-Channel Ground and Airborne Radio System
SOI	Signal Operation Instruction
TDA	Table of Distribution and Allowances
TOE	Table of Equipment
UHF	Ultra High Frequency
UMT	Unit Ministry Team
VHF	Very High Frequency

## ABSTRACT

The purpose of this study was to evaluate the impact of communication and transportation upon the Unit Ministry Team's (UMT) ability to perform its mission. The study began with a review of literature which described how UMTs in the past used communication and transportation equipment. Additionally, the literature review was conducted to examine the various types of communication and transportation equipment available to the UMT. A survey about communication and transportation followed the literature review to collect data from the field about how the equipment is used now and about its availability to the UMT. The next step was to develop a field experiment with two brigades -- one equipped with communication and transportation and the other with transportation only. The experiment was conducted to determine how communication and transportation impact upon the ability of the UMT to perform its mission. The study determined the impact of communication and transportation upon the UMT's ability to perform its mission and recommended that the UMT must have transportation to perform its mission effectively. Communication greatly enhances agility and synchronization of UMTs to provide timely and effective religious support.

## EXECUTIVE SUMMARY

1. **INTRODUCTION.** The religious support mission must be delivered by the Unit Ministry Team (UMT) to the soldiers on the battlefield. To deliver the religious support, the UMT needs to move and coordinate with units throughout the battlefield. Therefore, transportation and communication become essential resources for the UMT to accomplish its mission. The study identified the impact of this equipment upon the UMT's ability to do its mission. The study also recommended the most appropriate transportation and communication equipment alternative for the UMT on the AirLand Battlefield (ALB).

2. **PURPOSE.** To evaluate the transportation and communication requirements of the UMT on the battlefield.

3. **TASKING.** The Directorate of Combat Development, Concepts and Studies Branch, initiated this study in response to a Mission Area Analysis Deficiency and guidance from the Office of the Chief of Chaplains.

4. **SCOPE.** The study is battlefield focused and considers UMTs on the battlefield at every echelon, from battalion to theater, and included reserve units.

### 5. METHODOLOGY.

a. A thorough literature review of the history of the chaplaincy was conducted in order to determine how transportation and communication equipment were used, and how it impacted the ability of the UMT to provide religious support.

b. Next, a survey was administered to a population sample that represented approximately 10% of the chaplaincy from various force packages (Airborne, Light Infantry, Heavy Mech, etc.) and levels of echelons, from corps to battalion.

c. Finally a field experiment at NTC, with two homogeneous brigades, was conducted to validate the findings from the literature review and the survey.

6. **CONCLUSIONS.** Study conclusions derived from the study follow:

a. To effectively execute the religious support mission and reduce the threat against the UMT, mobility and voice/mobile communication must be available to the UMT.

b. Based on the analysis of the equipment available to the UMT, the following configuration provides the best package for the UMT:



(1) UMTs assigned to battalion or similar units should be authorized a VHF-FM Single Channel Ground and Air Radio System (SINGARS) vehicle mounted or manpack where vehicles are not available.

(2) UMTs assigned from maneuver brigades to corps rear boundary should be authorized the Mobile Subscriber Radiotelephone Terminal (MSRT) and the Digital Non-Secured Voice Terminal (DNVT).

c. UMT assigned to Light Infantry and Airborne units primarily travel on foot or aircraft. However, in some types of conflicts (Grenada and Panama, for example), these UMTs need a vehicle and communication equipment to provide effective religious support.

d. The UMT must receive more training on how to use communication equipment. Training should include, but not be limited to:

(1) Use of FM wireless radio equipment to include SINGARS and MSRT.

(2) Use of land line equipment such as the new DNVT.

(3) Use of Signal Operation Instructions (SOI).

## **CHAPTER 1 INTRODUCTION**

1. **STUDY PURPOSE.** The purpose of the study was to evaluate the transportation and communication requirements of the UMT on the ALB.

2. **PROBLEM.** The inadequate capability of the UMT to communicate and move between units on the battlefield severely limits the effectiveness of the religious support mission. There is no officially approved study which documents or evaluates the essentiality of transportation and communication equipment for the UMT on the battlefield. Present Table of Organization and Equipment (TOEs) and Modified Tables of Organization and Equipment (MTOEs) do not authorize the UMT radio communication equipment for utilization during movement.

3. **IMPACT OF THE PROBLEM.** Without communication equipment and transportation the religious support is limited to soldiers in the immediate area where the UMT is located. Without communication and transportation the UMT loses the agility and timely synchronization necessary for mission performance. The commander's ability to immediately contact the UMT will be jeopardized and the UMT's ability to respond in timely fashion will be limited.

### **4. OBJECTIVES.**

a. To determine the communication and transportation requirements for the UMT in different force packages (e.g., Airborne, Light/Heavy) on the ALB.

b. To examine the availability, capability, and limitation of transportation and communication equipment to support the UMT requirements.

c. To identify changes in doctrine, organization, training, leader development, and materiel to overcome deficiencies identified in the Battlefield Development Plan (BDP).

5. **ESSENTIAL ELEMENTS OF ANALYSIS (EEA).** At the beginning of the study process, the study agent developed EEAs that supported the study objectives. The EEAs were as follows.

a. How does the threat impact the UMT communication and transportation needs?

b. What are the missions of the UMT on the ALB?

c. How do the missions of the UMT determine communication and transportation needs?

d. What essential information must be transferred to and

from UMTs in terms of quantity, priority, classification, perishability/speed of service required, type, and frequency?

- e. Who is the UMT sender and receiver of information?
- f. How will the UMT deliver religious support to the ALB?
- g. How does dedicated transportation and communication equipment impact the UMT ability to perform their missions to standards?
- h. What dedicated communication and transportation equipment is authorized in TOEs?
- i. What are the limitations and how compatible is the UMT transportation and communication equipment on the battlefield?
- j. What type of transportation and communication equipment have the UMTs used in the past?
- k. How does the Commander's need to communicate with the UMT affect transportation and communication requirements?
- l. What transportation and communication equipment does the UMT require to provide effective religious support in a battlefield environment as portrayed by the CASCOM Notional Corps Laydown (e.g, unit dispersion and types)?
- m. How does Army doctrine impact the UMT communication and transportation requirements?
- n. How do the requirements of this study relate to the Battlefield Operating System?
- o. What are the opportunities, limitations and availability of using non-dedicated communication equipment?
- p. What are the implications of this study for changes in doctrine, organization, training, leader development, and materiel?

## 6. ASSUMPTIONS.

- a. ALB doctrine will remain the Army war fighting doctrine.
- b. Forward Thrust will remain Army doctrine and applies to all echelons on the battlefield.
- c. Base communication capabilities will be available to the UMT on the ALB.
- d. The presence of the UMT with soldiers is a morale multiplier in combat.

## **CHAPTER 2**

### **THE THREAT**

1. **PURPOSE.** This chapter highlights the threat posed to UMTs along the operational continuum.

#### **2. The Operational Continuum.**

a. Military operations and activities are conducted against threats which may be described as three general states of an operational continuum; peacetime competition, conflict and war.

b. The states are described as follows:

(1) Peacetime Competition - normal activities between or within nations which are nonhostile.

(2) Conflict - an armed struggle or clash between organized parties within a nation or between nations in order to achieve limited political or military objectives.

(3) War - a sustained armed conflict between nations or organized groups within a nation involving regular and irregular forces in a series of connected battles and campaigns to achieve vital national objectives.

#### **3. Peacetime Competition.**

a. Peacetime competition includes the normal pressures and exchanges between nations, short of combat operation or active support to a warring nation.

b. The Army may assume a number of such related missions in the future - combating terrorism, drug interdiction, disaster relief, civil works, nation building, and security assistance.

c. UMTs will be involved in peacetime competition as their units are involved and will be subjected to the same type of threat.

#### **4. Conflicts.**

a. In the long-range period, the Army must intensify its efforts to deal with low-intensity conflicts. Old and new regional animosities may erupt into an armed struggle or clash between organized parties with a nation or between nations in order to achieve limited political or military objectives. Such conflicts may easily spread outside the confines of the warring parties and threaten to become expanded war.

b. Conflicts are often protracted, confined to a restricted geographic area, and constrained in weaponry and level of violence. However, with the proliferation of modern weaponry and

munition sophistication; i.e.; chemical weapons, a Third World Country may become a menacing threat to its neighbors and whole regions.

c. US response to such threats may be exercised in an indirect manner, such as a show of force, while supporting other elements of national power. More direct responses may include short, focused and direct application of forces.

d. UMTs will likely be involved in any significant projection of their units into a geographic area.

## 5. War.

a. The Soviet threat, which has prevailed Europe for the past past 45 years, changed drastically with the dissolution of the Warsaw Pact and recent Soviet internal dissention. The Soviets are no longer considered the same antagonistic foe to our national interest. Whereas forces will be withdrawn from the European theater, a sizable forward deployed force will remain.

b. Though the breakout of hostilities in Europe is remote, the US must preserve the capability to fight and win on the mid and high-intensity battlefield. Whereas Soviet cooperation with the US has been notable under new Soviet policies, the Soviet legacy of offensive warfare doctrine and Soviet-built equipment and missiles remain in many surrogate and Third World Nations.

c. Desert Storm demonstrated modified soviet warfighting doctrine with older, mostly Soviet equipment. During the campaign, SCUD missile attacks demonstrated the constant threat of even older weapons systems. One can imagine what might have happened if our foe possessed the latest generation of Soviet "smart" weapons with similar capability to our own.

d. Though the Iraqi army deployed defensively and proved to be a weak foe, a more tenacious army with more modern weapons would employ the same strategy: strike hard, with surprise, deep into allied rear to disrupt the lines of communication, logistical support, and command and control.

e. The ability of the Soviets to attack corps rear areas by artillery bombardment, missile and air strikes means that no area on the battlefield is safe. Satellite and other air and ground surveillance systems reduce the ability of forces to camouflage themselves. Chemicals, both persistent and nonpersistent, can be expected at any time after initiation of hostilities. Forces possessing tactical nuclear weapons can be anticipated once a threat force is halted and can no longer realize the accomplishment of its objectives.

f. UMTs are embedded in army units throughout the battlefield. Generally, they experience the same threat as the units to which they are assigned. The nonlinear battlefield conceived in AirLand Operations (ALO) will produce many casualties with intense destructive force projected from long range fires. The UMT will seek to minister in this environment and will itself be subject to all the stresses of combat around it.

g. The ability to move and communicate with parent or friendly units while moving throughout the battlefield can only reduce the level of threat the UMT will be exposed to in the ALO environment.

### CHAPTER 3 A HISTORICAL PERSPECTIVE

1. This chapter provides a background of the transportation and communication means used by the Chaplain corps throughout its history.

2. Background in transportation authorization.

a. Throughout it's history, the Chaplain Corps has employed every available means of transportation to deliver religious support to the soldiers on the battlefield. However, its ability to provide effective religious support has been severely handicapped without dedicated vehicles. In a letter dated 16 March 1950, a Colonel acting as observer for the Requirement Section on an inspection of operations in the Mediterranean, stated:

Chaplains were definitely handicapped in carrying on their work due to lack of transportation. Chaplains had to try to thumb rides in order to visit aid stations, bury the dead, and conduct services in the different units of their organization.

b. Transportation has been essential to accomplish the religious support mission from the very beginning of the Army Chaplaincy. Like other members of the staff, chaplains were not initially authorized horses, but in 1795 they were allowed forage for their privately owned horses! This allocation was the first recognition that transportation (horse) was directly related to the religious support mission. In 1847, this allocation became law under the Act of 11 February.<sup>1</sup> In 1864, Congress increased the authorization for forage from one to two horses. This authorization recognized the chaplain's need for cargo space since he was not allowed to transport baggage in Army wagons.<sup>2</sup> Eventually some chaplains were provided with a horse and forage, however, this was not an authorization, but rather an act of grace dependent on the generosity of commanders and availability of resources.

c. With the motorization of the Army, the chaplain ceased to be a mounted officer except when attached to a mounted or horse-drawn organization. This made his need for transportation in the performance of his duties more of a problem than in the earlier days when he had his own horse, assigned or privately

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<sup>1</sup>Chaplains Of The US Army History, page 81

<sup>2</sup>Chaplains Of The US Army, page 116

owned. Motorized units traveled faster and greater distances than previous units, creating a greater demand for mobility. This was a difficult obstacle to overcome without dedicated transportation.

d. On February 2, 1901 the Session II of the 56th Congress of the United States, enacted chapter 192, section 12, of Title 10 US Code. The purpose of this law was, "an Act to increase the efficiency of the permanent military establishment of the United States." The last sentence of section 12 states: "When serving in the field, chaplains shall be furnished with necessary means of transportation by the Quartermaster's Department." This legislation recognized the transportation requirement of the chaplain while in the field. However, it did not provide an authorization in the TO&E.

e. To comply with Title 10, commanders provided transportation for the chaplain from a pool of vehicles assigned to the command. That proved to be ineffective, especially during war. In many instances chaplains failed to keep appointments because requisition cars were late or unavailable. This created a morale problem for the soldier awaiting the chaplain.

f. Not every commander viewed the religious support mission with the same importance. Therefore, some chaplains were left without transportation and at the mercy of others to provide rides to accomplish the religious support mission.

g. Finally, War Department Circulars 81, dated 23 February 1944; 355, dated 28 Nov 1945; and 233, dated 26 Aug 1947, authorized a quarter-ton truck and a quarter-ton trailer for each chaplain covered by TOE. These circulars provided the chaplain authorization to acquire transportation to travel in a wide and ever demanding battlefield. Of course, this did not solve every problem, for chaplains were on duty in situations where a different type of transportation was required. For example, some chaplains in Alaska were able to reach detachments of their men only by dog team, airplane, or supply boat making hazardous trips along a rocky coast.<sup>3</sup>

h. In a letter dated, 27 Nov 1951, the Chief of Chaplains recommended that the proposed revision of Service Regulation (SR) 310-30-4, 1 Aug 1949, include some statement of policy reflecting the chaplain's unique need for transportation. He suggested that commanders be assigned the responsibility IAW AR 600-20 to ensure the availability of transportation at all times for the chaplain.

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<sup>3</sup>History Of The Chaplaincy, p. 257



i. The continuing assignment of responsibility to commanders to provide the chaplains with necessary transportation resulted in a change to chapter 192, section 12 of Title 10 of the US Code on Aug 10, 1956, which reads:

Each Commanding Officer shall furnish facilities, including necessary transportation, to any chaplain assigned to his command, to assist that chaplain in performing his duties.  
USC Title 10 sec 3547 (B)

For the first time, Congress made it clear that the responsibility to provide transportation to the chaplain was the individual Commander's rather than of the Quartermaster officer.

j. Currently the UMT, minimally composed of one chaplain and one chaplain assistant, is authorized transportation as prescribed in AR 71-13, 3-60 (12a) which states: "Brigade, group, and similar headquarters companies will be authorized one vehicle per two staff sections plus one vehicle per authorized chaplain." Clearly the implication is for an operational vehicle for the UMT.

k. The recent listing of a separate "UMT section" on the "L" series TO&Es lists the vehicle and trailer within that section. This clearly identifies the vehicle with the UMT mission. However, units may "absorb" the UMT's vehicle and it remains an administrative vehicle in effect. Nevertheless, it should be noted that in some situations the vehicle is absorbed by the unit because the UMT does not use it enough or voluntarily gives it away to evade maintenance responsibilities.

### 3. Background of communication authorization.

a. The history of the authorization and usage of communication equipment in the religious support mission is limited. Various reasons account for the lack of historical information as follows:

(1) The only piece of communication equipment authorized for the UMT since about 1957, is the TA312 land line field telephone. This authorization was made for the staff sections at various echelons and not specifically for the chaplain section as in the case of the vehicle. However, this authorization implies the chaplain section's need for communication.

(2) This equipment does not provide for mobile communication as the UMT travels between units on the battlefield. Therefore, most of the time the UMT uses borrowed equipment, if at all, when traveling away from the location where the field telephone is connected.

b. Since its authorization, chaplains and chaplain assistants have used the field telephone to communicate with lower and higher echelons to provide daily reports, arrange religious support, coordinate denominational coverage, and request different types of information. Such equipment provides the UMT with the capability to be reached on the battlefield. But, it can't be reached when away from the telephone, of course.

c. Experiences during war have proven the need for the UMT to be accessible to respond to emergency situations. However, this accessibility is not possible if the UMT travels on the battlefield without communication. Additionally, the threat to which the members of the chaplain section are exposed has been capture in many after action reports from national training centers, and actual combat experiences. Traveling in a highly fluid battlefield, where secured areas can become insecure in a short time, without means of communication the UMT is placed in a vulnerable position.

4. Experiences during war, conflicts, and training exercises have emphasized the essentiality of communication and transportation.

a. World War II.

(1) Chaplains were expected to follow their troops before, during and after battle. General Brehon Somervell, who commanded the Services of Supply under which the chaplains served, wrote:

Living and working with the troops, the chaplains furnished one of the greatest morale factors in the war. Before battle and during it, the soldier could always turn to the chaplain for strength, and courage, for the chaplains followed the troops whereafter they went.... The wounded received help and consolation... The dead were buried in the cloak of their faiths.

In terms of transportation chaplains traveled by jeep, airplane, parachute, ship, snow shoes, and train to reach beyond what any circuit rider of the past could have accomplished.<sup>4</sup>

(2) Although, there was no authorization in the TO&E for transportation for the chaplain section, some commanders who recognized the need, assigned a vehicle from the unit pool for their chaplains. A number of civilian organizations recognized the chaplain's need for transportation and provided vehicles to

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<sup>4</sup>The U.S. Army Chaplaincy - 1920-1945 WWII, p. 190

meet this need as well. For examples: the Jewish Welfare Board provided cars for their chaplains serving with occupational troops; the American Cable Company provided a Plymouth sedan for the chaplain of a General Hospital; and the Slovak Union of Cleveland donated ten van trailers equipped as chapels (operational vehicle) in the attempt to compensate for the lack of transportation.<sup>5</sup>

(3) No information concerning the use of communication equipment or communications made by the chaplains during World War II was found in the historical documents reviewed.

b. Korean War.

(1) During the Korean war, with minimal variations, chaplains experienced similar demands as during World War II. The challenges to provide religious support in a fast changing battlefield were overcome only by those with assigned transportation. Chaplains were required to travel great distances, use every mean of transportation available, and spend much time traveling in order to provide religious support to their units. The following statement, recorded in the U.S. Army Chaplaincy 1945-1975, Warring Ideologies-The Battle For Korea, page 88, offers some insight as to what chaplains did to provide religious support during the war.

Because of the constantly changing front and the rapid movement of units, some chaplains had to travel more than 50 miles between the elements of their "congregations." A chaplain reported that to get to one of his units required flying for 1 hour, riding a boat for 1 1/2 hours, and driving a jeep for another 1/2 hour.

(2) Limited information was found on the chaplains' experiences with transportation or communication during the Korean war. The lack of historical information seems to indicate that the expectations of the chaplaincy were that communication would not be available, and transportation would be difficult, at best.

c. Vietnam conflict. During the early years of chaplain involvement in the Republic of Vietnam (RVN), chaplains were flown by helicopter to minister to the U.S. troops throughout the RVN. However, after the early years chaplains also used their assigned vehicle, especially when air support was not available. Although, communication was very important, UMTs did not have TO&E authorized radio equipment, but depended on their assigned field telephone and/or radio equipment authorized by the unit

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<sup>5</sup>History Chaplains of the United States Army, p. 186

commander. Chaplain (COL) James Robnolt who served with a Combat Engineer unit in Vietnam shared his experience:

In Vietnam I had a PRC 25 FM radio and a 1 1/4 ton truck which offered better protection than the 1/4 ton jeep against mine booby traps on the roads. We had no air support and without transportation I would have not been able to cover my units. I was out on the road 5 out of every 8 days. The radio was what kept me alive. Only through the radio was I aware when roads changed from green [minimal threat] to red [under enemy control].

d. Grenada.

(1) During Operation Urgent Fury , dated 25 Oct 1983, a number of problems with communication and transportation were identified. The following quotation was extracted from a consolidated after action report from the 82d Airborne Division UMTs to the G-3, dated 16 Dec 83:

Communication among chaplains during the tactical situation was difficult to impossible. Supervisory chaplains had difficulty determining the location, needs, and/or problems during times of battle, area sweeps, and recon in force missions . . . Deployed chaplains often would be out of touch with their supervisory chaplain. Chaplain movements within the Division area were hard to monitor due to lack of proper information flow . . . Necessary supplies did not reach unit chaplains in a timely manner.

(2) This situation indicates the difficulties encountered by supervisory and subordinate UMTs in coordinating religious support in a Low Intensity Conflict without mobile communication equipment. Coordination is critical in providing denominational coverage, especially Catholic and Jewish support. Without coordination it is unlikely that units, especially those without organic UMTs, would receive effective religious support.

(3) Vehicles were not luxury for the UMT in Grenada, but a necessity which could make the difference between mission accomplishment and mission failure. Following is a quotation from the consolidated after action report referred to in subparagraph (1) above, which addresses the importance of transportation during Urgent Fury:

It was essential that some means of transportation be contracted as there were no TOE vehicles available for additional chaplain personnel. Without TOE vehicle support and with very limited aircraft support UMTs were extremely limited in their ability to cover their own units , and it was impossible to develop an area coverage plan for units without assigned chaplains or task forces which did not

deploy a chaplain for religious support... Chaplains without transportation could not cover units without chaplains; specific major faith chaplains (especially Roman Catholic) could not make scheduled services in a timely manner; lack of transportation drastically limited the number of religious services, ministrations, and visitations which could possibly be made during a day's time.

(4) Following are some of the recommendations from the UMTs that participated in the operation:

For a supervisory chaplain to maintain contact with subordinate chaplains in a field environment it is important that some type of transmission availability be established. This could be accomplished by his CAS [chapel activity specialist] being issued a small portable radio transmitter. Each CAS should be trained in the procedures of radio transmissions from his/her commo shop within their unit . . .

That priority be predetermined for vehicle follow-on deployment. Shared utilization of vehicles limits chaplains' functional role [sic] as most other needs of sections would separate chaplain from CAS and or [sic] not take the chaplain to needed areas for religious coverage. TOE be reexamined for authorization for chaplain assigned vehicle where it presently exists and that proper assignment be implemented and TOE's be reexamined where no transportation is presently authorized for a chaplain. A minimum of one TOE vehicle is absolutely essential per major unit utilizing more than one chaplain (i.e. Bde, Sep Bn, DISCOM, COSCOM, etc.).

(5) The reason for the delay of the UMT's vehicle upon deployment is directly related to the equipment readiness code (ERC) in the TOE. The UMT's vehicle has an ERC of "B". During deployment the equipment coded "A" is deployed first then equipment coded "B". Therefore, if the UMT vehicle is to be deployed immediately the ERC must be changed to "A".

e. Panama.

(1) During Operation Just Cause in Panama, 20 Dec 1989, UMTs experienced many of the same frustrations experienced by UMTs in Grenada. None of the Bde or Bn UMTs had assigned vehicles; only the Regiment chaplain had one. After the resistance was over, some UMTs were issued a civilian vehicle. Others used whatever means of transportation was available. One of the Bn UMTs traveled in the morning with the mess truck and stayed with the unit, only to return in the evening with the

trash truck!<sup>6</sup> As one chaplain stated, "we became very familiar with trash bags."

(2) The success of the UMT's mission during emergency situations is dependent upon its ability to respond promptly and be present to minister to casualties. Lack of transportation during war can result in mission failure. In interviews conducted at Ft. Ord following Operation Just Cause, an Infantry Bn chaplain in the 7th Infantry Division shared the following experience:

I was one of the chaplains that experienced an actual death in the unit. It was an accidental discharge (member killed by friendly force). He was shot, taken to the Medical center and pronounced dead within 15 minutes. I was notified immediately, however it took me 20 minutes to get a vehicle that would take me there. It happened to be a vehicle driving by, which I stopped and asked the driver to take me. I was there within 25 minutes. Unfortunately he was already dead and they were putting him in the ambulance as I got there. Fortunately the regiment chaplain was in the area and was able to get to the Medical Center immediately. He had a vehicle.

(3) Difficulties with communication were experienced during the initial phase of the operation; however, when civilian telephones were available, the UMTs used them without any problem. However, civilian means of communication are not always available and do not provide secure communication capabilities.

f. Desert Shield/Desert Storm.

(1) The United States and allied forces conducted one of the most massive armor offensive of all time during Desert Shield and Desert Storm in South West Asia. Over five hundred thousand troops, among which were many chaplains and chaplains assistants, were deployed.

(2) Statements about the need for communication equipment and vehicles surfaced in numerous after action reports from many type units at different echelons. One after action report from Chaplain John K. Allyn, 2d Corps Support Command Chaplain, states:

Chaplains have been everywhere, preaching, counseling, caring for soldiers and leaders, being spiritual leaders themselves. . . From the beginning of the air campaign to the withdrawal

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<sup>6</sup>Interviews with UMTs from the 7th ID

from Iraq they have conducted 1007 protestant worship services, 440 masses and countless bible studies. They reported over 4000 counseling, and 1382 visits to sites where troops live, work and fight. Some hitchhike, most have their own vehicles all have focused on pastoring people and ignored their own comfort.

(3) Statements like this one are commonly found in most after action reports. It indicates that during Desert Shield and Desert Storm the UMTs were required to travel extensively and communicate frequently with their units to provide effective religious support. However, not all UMTs have the necessary resources to do this.

(4) Reports from the Center for Army Lessons Learned (CALL) about the problems the UMT encountered in relation to the lack of transportation and communication during Desert Shield/Storm follow:

Many UMTs did not have a vehicle available to them. The UMT needs a vehicle if it is expected to perform ministry to soldiers in units dispersed from 2 blocks to 200 miles. Without the transportation to visit the troops, UMTs can not assess morale. This was a problem at most levels. Religious area coverage was not provided when dedicated transportation was not available for the UMT. Because units were scattered and distances were great, it was impossible for chaplains to provide worship services for units without assigned UMT. The units frequently moved and without a vehicle the UMT could spend 1/2 day trying to find units which had moved. Hitchhiking rides was not possible for many UMTs.

In static positions Mobile Subscriber Equipment (MSE) is adequate for the UMT. However, after a move it takes several hours to reestablish MSE. During movement, UMT has no organic communication . . . Recommend that TOE for UMT include MSRT for vehicle.

Management of religious support was severely hindered by the lack of integrated, organic communication assets for Corps Artillery UMTs. Communication from battalion to brigade was totally FM. Corps to Bde was totally land line. The Corps Artillery had 2 brigades in Kuwait and 2 in Iraq . . . UMTs need organic communication assets. This communication equipment should be compatible to that of the organic unit and should allow for communication between different echelon UMTs.

Without communication equipment the UMTs were not able to adequately: arrange services, track casualties, receive Red Cross messages, know the location of units or enemy location, report sighted ordinance, or call for help if needed during

movement . . . Radios should be on TOE for UMTs in tactical units.

(5) These statements make it clear that in a battlefield situation, such as Desert Shield and Desert Storm, dedicated communication and transportation are not luxuries but rather essential equipment to provide religious support to the soldiers.

(6) Although many UMTs had vehicles, they still encountered serious problems due to poor mechanical condition. This was specially true for UMTs without vehicles prior to deployment. Comments in after action reports revealed that vehicles issued to the UMTs were drawn from stocks turned in for the reduction of forces in Europe which were in poor mechanical condition. In an after action report addressing this problem the 2d Corps Support Command Chaplain suggests:

Equipment (vehicle, communication and ecclesiastical) should be on hand at all times, not added on or after deployment.

(7) Although the UMT is authorized a telephone terminal, it was clear that it did not provide sufficient communication. Some of the problems mentioned by UMTs in after action reports were:

(a) Constantly realigning switchboards therefore numbers change all the time (Could not keep up with telephone numbers).

(b) Constantly going out or interruptions

(8) Desert Shield/Storm provided an opportunity to use modern equipment such as the MSE and laptop computers which had never been used on the battlefield. Some of the observations related to these areas follow:

In recent years the use of desktop computers, modems, other computer peripherals, and electronic mail have been emphasized in chaplaincy channels. Doctrine has been developed that such use would continue in combat through the use of laptops and electronic mail. Despite the availability and excessive use of electronic mail by other staff sections, a chaplaincy bulletin board was never established by the Corps UMT and data was laboriously passed by verbal telephonic communication.

Computers were essential at Corps - COSCOM and Division also use it. Laptop was taken forward to KKMC. . .

The newly fielded MSE communication equipment is vastly different in function than the older FM radio system.



Currently only those with some schooling in its use and function really understand it and see it as more than a magical black box with telephone attached. Explanation by operations when asked for assistance in getting a number resulted in many cryptic references that we were expected to understand.

(9) During Desert Shield/Storm many commanders recognized the UMT's need for communication equipment and transportation. In an interview conducted by the 1st Inf Div (Mech), Ft. Riley, Kansas, Bde and Bn commanders who went to Desert Shield/Storm were asked, what support does the UMT require? Their responses follow:

(a) Bde Commanders' responses:

The chaplain needs a vehicle with radio and navigation equipment . . . Sustain him like everyone else, they provide an invaluable service.

Needs a vehicle, radio, navigation system . . .

(b) Bn Commanders' responses:

You have got to keep a vehicle. He needs two radios, both with secure capabilities. He can monitor the command net (he also has a ministry to the leaders) and the admin net for contact. Navigation equipment and night vision goggles for both the chaplain and assistant. We move at night and they move with the unit. This is a major safety factor in peacetime.

Vehicle with a trailers is essential to be able to set up shop . . .

Must have vehicle. Needs radio (not on current TOE), normal field equipment and a Magellan GPS and a small generator.

I don't have "stuff" to give. A chaplain needs a paragraph and line number to get equipment. Anyone wandering around without a radio or navigation equipment, in this environment, is not wise.

An identified vehicle in the MTOE! It's a pain when things get tight to "time share" vehicles with someone else. This reduces the effective time for a chaplain. The chaplain needs to be able to contact the unit and know where he is . . .

(10) These quotations make it clear that the UMT needs transportation and communication to provide effective religious support to the command. It is also clear that UMTs used a variety of means to communicate before, during and after the war. Computers can provide the means to transfer information rapidly and effortlessly on the battlefield. This is true specially at echelons above brigade. Additionally it is clear that if the UMT is expected to stay abreast with technology, training must be developed to meet those needs.

g. National Training Centers experiences.

(1) Reports from the Observers/Controllers (O/Cs) at the National Training Center (NTC) constantly indicate the problems UMTs meet without vehicles and/or radios. In a consolidated report, dated 2 Nov 88, the following problems were identified:

A majority of UMTs are not driving any vehicle or one that is not unit compatible. Oftentimes their vehicle is one given or loaned to them or one they have scrounged. If this has happened, they are often told that "higher priorities" dictate the diversion of the vehicle. At times they are told that the vehicle belongs to the S-1 and not the UMT. The end result is that the ability of the UMT to perform or provide ministry is greatly reduced. It is obvious that this is not generally a systems problem, as many like units UMTs do have their assigned, dedicated, MTOE vehicle and have no problems. The problem seems to stem from:

- a. A lack of understanding and knowledge of the chaplain as to exactly what is his. [authorized]
- b. A lack of understanding on the part of commanders or staff as to proper authorization and utilization of vehicles/equipment.
- c. A lack of utilization of equipment on the part of the UMT which has resulted in a loss due to nonuse. Once this perception has been established within a unit, it is difficult to change.

(2) A recent quarterly report, dated Sep 90, in which 25 different UMTs consisting of 27 Chaplains and 26 Chaplain Assistants were observed stated:

- (a) RADIOS--[of the 25 UMTs] Only 4 UMTs had

radios, one of which was nonfunctional . . . A lack of a radio has caused the death of at least 4 UMTs because they moved into an area that was originally safe but became enemy territory during their move. Had they had a radio, they could have been monitoring the movement of the battle and avoided their loss (to include capture, in one case).  
[emphasis by writer]

(b) TRANSPORTATION--12 had Commercial Utility Cargo Vehicles (CUCV); 5 had jeeps; 4 had pick-ups; 6 had no vehicles at all. Almost without exception, the vehicles were in poor mechanical condition and were really unreliable. They usually were vehicles the units no longer wanted and the UMTs took them. In only 10 cases did the UMTs actually bring their assigned vehicles with them. Other UMTs were given their vehicles just before the rotation. Nevertheless, I find that the UMTs probably drive as much, if not more, miles than any other staff officer. They definitely have a legitimate need for a HUMMV; the CUCV is not a suitable vehicle for tactical/field use. . .

These UMTs conducted 58 worship services, 29 hospital visits and traveled a total of about 1107 miles per UMT with vehicle. The importance of having transportation and communication is obvious. If the UMT is to perform successfully its mission these essential assets must be available.

(3) Another report from a rotation in 1990 states:

(a) RADIOS--No UMT had radios. All agreed on the need for them as did various commanders. One UMT would borrow radios and call the next unit to be visited. They did have the various unit's frequencies.

(b) TRANSPORTATION--No UMT had TO&E assigned vehicles. All vehicles were assigned by the S-1 of the units and all were in poor condition. Each UMT experienced considerable maintenance problems ranging from 3 down days to several hours. In each case, the chaplain had to persuade the company to fix the vehicle or he made the repairs himself. One UMT did not receive its vehicle until the third day at the NTC; it was being used by a staff section because they didn't think the chaplain would need it while in the dust bowl. As a result of this appropriation, the vehicle was damaged by some unknown person in the staff section which caused a loss of the vehicle for a short period of time.

g. Center for Army Lessons Learned.

(1) Official reports from CALL, Ft. Leavenworth, KS, reflect vital information from the National Training Centers.

(2) Following are two reports from CALL which address communication and transportation issues during a heavy division field training exercise:

(a) Communication:

The lack of commercial and field phones as well as the lack of radios accessible to the chaplains hampered communications and coordination for reporting critical chaplain activities and support needs. Recommendations: That all UMTs have radios in vehicles and are trained in the use of the Admin Log Net. (Observation #2602, 000114, dated 5/23/90, by MAJ Mitchiner)

(b) Transportation:

The Chaplain is not authorized a separate vehicle. Due to the distances involved in providing adequate coverage to the Ambulance Exchange Point, Hospital, Rear Detachment, etc. It is essential that the chaplain be authorized a vehicle. (Observation #2612, dated 5/23/90, by CPT Smith)

5. Conclusion.

a. These historical data indicate increasing frustration among UMTs which are unable to perform effectively their mission due to the lack of transportation and communication equipment. The data also suggest that the UMT vehicle should be placed in a higher priority for deployment so that the UMT could have ready access to its assigned vehicle in the TO&E. Another suggestion from the data was that a wireless vehicle/manpack radio be assigned the UMT to maintain communication with its units and subordinate supervisory UMTs.

b. Additionally, the historical data highlights the exposure of the UMT to the threat as it travels between units. Without mobile radio communication the UMT is unaware of the flow of the battle, or areas which may have become enemy territory during the intervening time.

# **CHAPTER 4** **FIELD EXPERIMENT SUMMARY**

**1. PURPOSE.** This chapter is a general summary of UMT performance in each major task of the METL used during the field experiment at NTC. The purpose of the experiment was to determine the impact of communication and transportation on the ability of the UMT to perform its mission. For more information about the experiment and UMT performance see Appendix C.

**2. BACKGROUND.** The experiment included two brigade staff UMTs and two battalion UMTs from an infantry (mechanized) division. One brigade and one battalion UMT were equipped with dedicated communication (radio FM) and transportation. These UMTs are identified as BDE/A and BN/A in the experiment. The other brigade and battalion UMTs with dedicated transportation, but without communication (radio FM), are identified as BDE/B and BN/B in the experiment.

**3. TASK 1: WORSHIP SERVICES.** The following table presents each UMT overall performance data for this task:

**TABLE 1**  
**TASK 1 PERFORMANCE**

QTY OF TASKS PERFORMED			% DIFF		TIME SPENT HRS			% DIFF		TIME PER TASK HRS			% DIFF	
BDE					BDE					BDE				
A	B				A	B				A	B			
9	9		0%		18	32		-43.75%		2	4		-50%	
BN					BN					BN				
A	B				A	B				A	B			
9	10		-10%		3	4		-25.0%		.33	.40		-18.4	

**NOTES:** BDE A AND BN A REPRESENT UMTS WITH DEDICATED RADIO COMMUNICATION AND TRANSPORTATION.  
BDE B AND BN B REPRESENT UMTS WITH DEDICATED TRANSPORTATION ONLY.  
TO CALCULATE PERCENTAGE OF DIFFERENCE, BDE/B AND BN/B TEAMS REPRESENT 100%

**4. SUBTASKS.** Following are the sub-tasks which comprise this task:

- a. Direct Religious Support
- b. General Religious Support
- c. Coordinate Religious Support
- d. Request Ecclesiastical Supplies
- e. Request UMT personnel replacement

## **5. TASK RESULTS AND ANALYSIS.**

a. Both BDE UMTs performed the same number of sub-tasks. However, the logs indicate a difference in the amount of religious support provided to the units. The following statements explain the difference.

(1) BDE/A did 1 more General Religious Support (GRS) (sub-task b) and spent 50 minutes less than BDE/B. GRS is primarily a BDE UMT responsibility as it provides support for units without organic UMT and denominational coverage.

(2) BDE/B did 2 more coordinations (sub-task c) for religious support than BDE/A. It is clearly noticeable throughout the logs that BDE/B, without communication, required more steps to coordinate religious support than BDE/A.

(3) The logs indicate that only BDE/A requested UMT replacements (sub-task e). BDE/B, without dedicated communication, never received the killed in-action message sent through the BN S-1. Therefore, the BN was left without religious support in what could be considered one of the most critical times for the religious support mission. However, BDE/A, with dedicated communication and transportation, received the message and responded within 6 hours. It is critical for the BDE UMT to become aware of disabled UMTs as soon as possible. This information enables the BDE UMT to take the necessary steps to ensure that religious support is provided to the units without UMT.

b. Another important factor is that BDE/A spent half the time of BDE/B to perform these tasks. Time spent was dependent upon distances traveled, length of service, ability to coordinate and ability to reach the unit. These last two factors are very important because they show the impact of dedicated communication and transportation on the ability to perform the mission. The logs clearly indicate that BDE/A spent less time coordinating services and finding units than BDE/B.

c. At Bn level BN/A performed 1 sub-task less than BN/B. The logs indicate that BN/B required 1 more coordination than BN/A. As explained before, UMTs without dedicated communication required more steps to coordinate services than UMTs with dedicated communication equipment.

d. BN/A spent 1 hour less than BN/B to perform direct religious support (sub-task a). The number of services for both BN UMTs was the same; however, the transportation log indicates that BN/A UMT traveled 45km more than BN/B to perform this task. Considering this factor, one must agree that BN/A used time more effectively than BN/B.

e. A graphical presentation which compares each UMT performance follows:

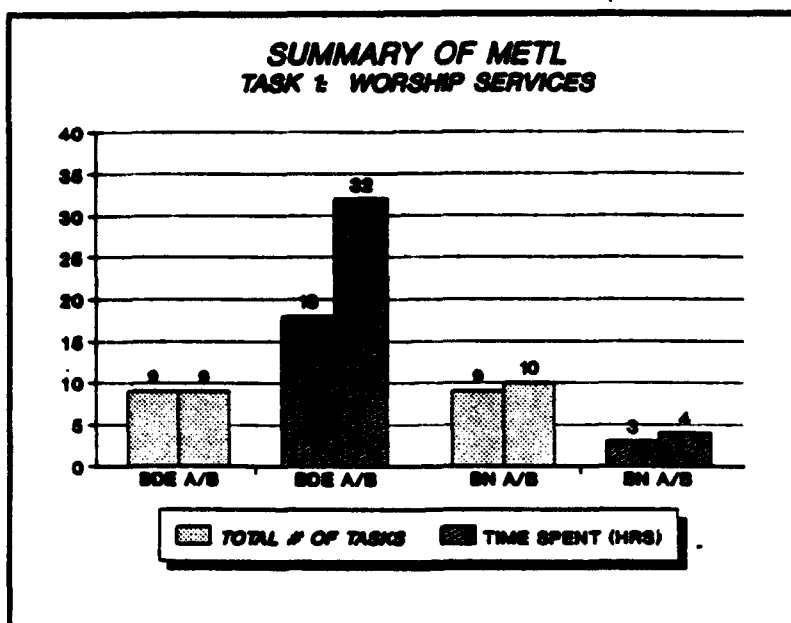


Figure 1  
SUMMARY OF METL 1

## 6. OBSERVATIONS.

a. UMTs with communication equipment spent less time to perform these tasks than UMTs without it. Better coordination allowed the units to be prepared when the UMT arrived. Therefore, last minute announcements for worship services and waiting time by the UMT to allow the troops to reach the service location were eliminated thereby allowing the UMT to use time more effectively.

b. Time is a critical factor in a rapidly changing battlefield as Airland Battle Operations is expected to be. The ability to move and find unit locations quickly, for which dedicated transportation and communication are essential, can supply the UMT the capability to provide religious support to more soldiers on the battlefield.

c. As indicated by the logs, UMTs with dedicated communication and transportation required less steps and time to coordinate for worship services than UMTs without this equipment.

d. Based on these results, one may conclude that dedicated communication and transportation enabled the UMTs to spend time more productively and coordinate service more effectively than UMTs without dedicated communication equipment.

7. **TASK 2: EMERGENCY MINISTRATIONS.** The following table presents each UMT overall performance data for this task.

**TABLE 2  
TASK 2 PERFORMANCE**

QTY OF TASKS % PERFORMED DIFF			TIME SPENT % HRS DIFF			TIME PER TASK % HRS DIFF		
BDE			BDE			BDE		
A	B		A	B		A	B	
15	5	200%	12.58	12.30	2.28%	.48	2.31	-79.2%
BN			BN			BN		
A	B		A	B		A	B	
9	3	200%	22.3	5	346%	2.3	1.4	64.3%

**NOTES:** BDE A AND BN A REPRESENT UMTS WITH DEDICATED RADIO COMMUNICATION AND TRANSPORTATION.  
BDE B AND BN B REPRESENT UMTS WITH DEDICATED TRANSPORTATION ONLY.  
TO CALCULATE PERCENTAGE OF DIFFERENCE, BDE/B AND BN/B TEAMS REPRESENT 100%

8. **SUBTASKS.** Following are the sub-tasks which comprise this task:

- a. Conduct memorial/funeral services
- b. Perform prayers, rites, and sacraments
- c. Perform service for mass burials
- d. Respond to mass casualty situations

9. **TASK RESULTS AND ANALYSIS.**

a. UMTs only performed sub-tasks 2 and 4 above since no opportunity arose to perform memorial/funeral services and mass burials.

b. BDE/A performed 10 sub-tasks more and spent 26 minutes less than BDE/B. The logs indicate that BDE/A provided better coverage because it was aware of battle conditions and casualty flow.

c. On an average, BDE/A spent 48.6 minutes per task and BDE/B spent 2 hours and 31 minutes per task. Time is a very important factor for the religious support mission especially when dealing with casualties.

d. BN/A performed 6 tasks more than BN/B and spent 17 hours and 05 minutes more than BN/B. The BN logs indicate that the UMT with communication and transportation equipment was more aware of battle conditions and casualty flow. The UMT without this



equipment was unaware when casualties occurred until it was too late to provide religious support.

e. A graphical presentation which compares each UMT performance follows:

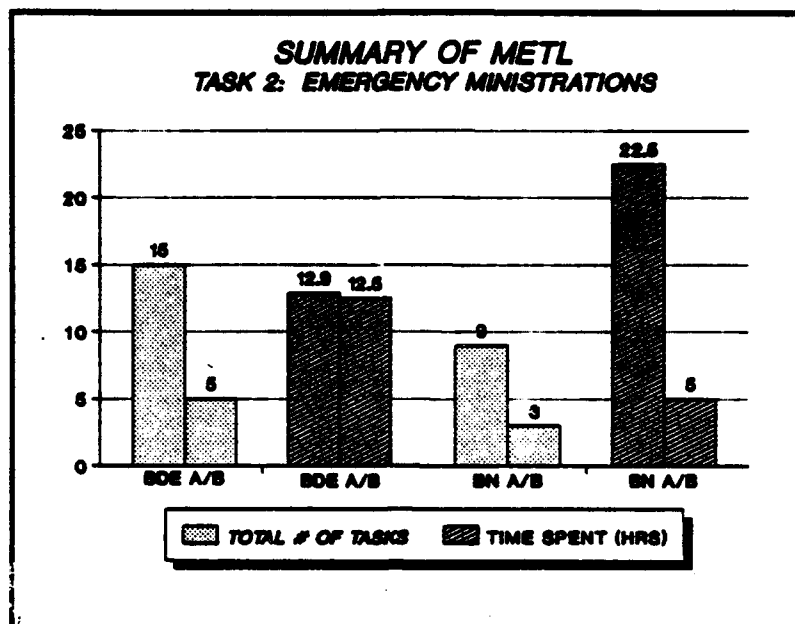


Figure 2  
SUMMARY OF METL 2

#### 10. OBSERVATIONS.

a. These sub-tasks are critical to the religious support mission. The fact that UMTs with dedicated communication and transportation responded much better than UMTs without this equipment indicates the positive impact this equipment has upon the UMT's ability to perform its mission.

b. UMTs with dedicated communication responded to more emergency situations and provided better coverage because they were aware of battle conditions and casualty flow.

c. Dedicated communication and transportation provided the UMT with the synchronization and agility necessary to respond effectively to emergencies.

d. Comments in the logs indicate that UMTs without dedicated communication would not become aware of the casualty flow unless they were at the Aid Station before casualties arrived. In one situation, the Bn UMT wrote in its log, "traveled to Main Aid Station's new location. There were many casualties..." This implied that the UMT had no prior knowledge that casualties were being taken there.

11. TASK 3: PASTORAL CARE. A presentation of each UMT overall performance data for this task follows:

TABLE 3  
TASK 3 PERFORMANCE

QTY OF TASKS PERFORMED			% DIFF	TIME SPENT HRS			% DIFF	TIME PER TASK HRS			% DIFF
BDE				BDE				BDE			
A	B			A	B			A	B		
43	11		290.9%	40.3	22		83.2%	.56	2		-72.0%
BN				BN				BN			
A	B			A	B			A	B		
8	20		-60.0%	14.5	28.15		-48.5%	1.48	1.24		19.4%

NOTES: BDE A AND BN A REPRESENT UMTS WITH DEDICATED RADIO COMMUNICATION AND TRANSPORTATION.  
BDE B AND BN B REPRESENT UMTS WITH DEDICATED TRANSPORTATION ONLY.  
TO CALCULATE PERCENTAGE OF DIFFERENCE, BDE/B AND BN/B TEAMS REPRESENT 100%

12. SUBTASKS. Following are the sub-tasks which comprise this task:

- Provide counseling for soldiers
- Visit units/elements, and UMTs
- Provide battle fatigue ministry

13. TASK RESULTS AND ANALYSIS.

a. Of the three sub-tasks listed, the UMTs performed only the first two. No battle fatigue counseling was recorded.

b. BDE/A performed 32 sub-tasks more than BDE/B and spent 18 hours and 30 minutes more than BDE/B.

c. Logs indicate that BDE/A did 20 more pastoral counseling sessions than BDE/B. By the UMT having dedicated communication, the units were able to access it easier and more frequently as counseling needs arose. On the contrary, BDE/B was advised of counseling needs upon arrival at unit locations. Additionally, when emergency counseling arose, units experienced difficulty locating the UMT without communication in a timely manner.

d. BN/A performed 12 tasks less than BN/B and spent 13 hours and 40 minutes less than BN/B.

e. The impact of communication was not as noticeable at BN level as at BDE level. However, BN/A provided counseling to 2 more soldiers than BN/B.

f. Surprisingly BN/B performed 14 more visits (sub-task b) than BN/A. The logs indicate that BN/B traveled 150 km more visiting units than BN/A. It seems that since BN/B did not have radio communication the better way to monitor units was through visits. However, BN/A with dedicated communication was more readily available to the units. This method works as long as battlefield conditions allowed the UMT to move between the units.

g. A graphical presentation which compares each UMT performance follows:

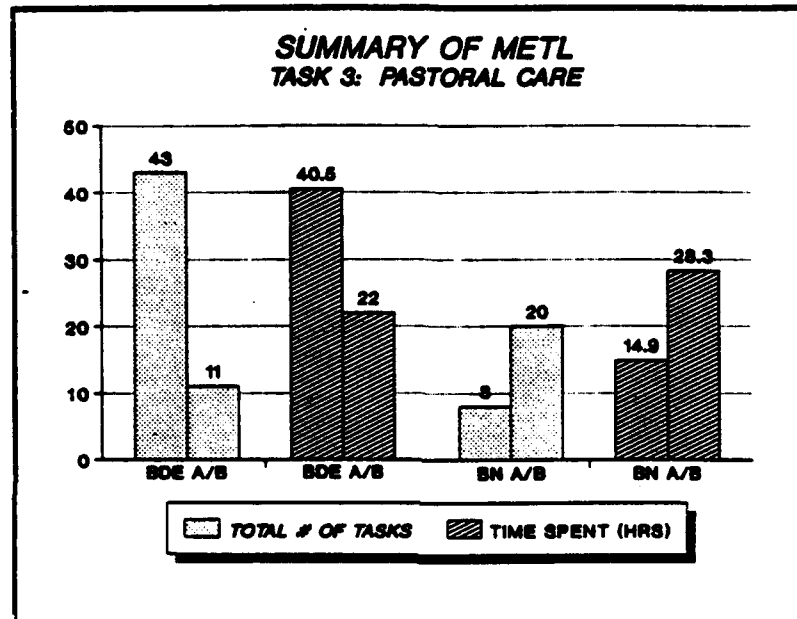


Figure 3  
SUMMARY OF METL 3

#### 14. ANALYSIS OBSERVATIONS.

a. At BDE level the UMT with dedicated communication equipment performed more tasks and used time more effectively than the UMT without it. However, at BN level, BN/B did 12 sub-tasks more than BN/A. Logs indicate that the BN UMT without communication depended more on personal contact to communicate with units and other UMTs than the UMT with dedicated communication. This factor contributed to the larger number of visits performed by BN/B.

b. Additionally, logs seem to indicate that at BN level the UMT was able to move between elements easier than at brigade level. BN UMTs have shorter distances to travel between elements and move primarily horizontally rather than vertically as the BDE UMT does.

c. Logs indicate that dedicated transportation enabled the UMTs to reach the units more effectively than if UMTs depended on rides or borrowed vehicles.

d. Overall, the impact of dedicated transportation is noticeable in all cases, but the impact of dedicated communication was primarily noticeable at BDE level.

15. TASK 4: ADVISE COMMANDER. The following table is a presentation of each UMT's overall performance data for this task:

TABLE 4  
TASK 4 PERFORMANCE

QTY OF TASKS PERFORMED			% DIFF	TIME SPENT HRS			% DIFF	TIME PER TASK HRS			% DIFF
BDE				BDE				BDE			
A	B			A	B			A	B		
19	6		216.7%	22	8		175.0%	1.9	1.2		58.3%
BN				BN				BN			
A	B			A	B			A	B		
4	2		100.0%	7	4		75.0%	1.25	2		-37.5%

NOTES: BDE A AND BN A REPRESENT UMTS WITH DEDICATED RADIO COMMUNICATION AND TRANSPORTATION.  
BDE B AND BN B REPRESENT UMTS WITH DEDICATED TRANSPORTATION ONLY.  
TO CALCULATE PERCENTAGE OF DIFFERENCE, BDE/B AND BN/B TEAMS REPRESENT 100%

16. SUBTASKS, Following are the sub-tasks which comprise this task:

- a. Advise the commander
- b. Attend Staff Or UMT Meetings

17. TASK RESULTS AND ANALYSIS.

a. BDE/A performed 13 tasks more than BDE/B and spent 14 hours more than BDE/B.

b. Logs indicate that UMTs with dedicated communication and transportation were better synchronized with and able to respond to the needs of the commanders. UMTs with dedicated communication were in contact with the commander's staff sections and units throughout the BN more than those without communication. This contact allows the UMT to be in a better position to monitor the BN and advise the commanders.

c. BN/A performed 2 tasks more than BN/B and spent 3 hours more than BN/B which indicates the benefit of dedicated communication and transportation to perform these sub-tasks.

d. A graphical presentation which compares each UMT performance follows:

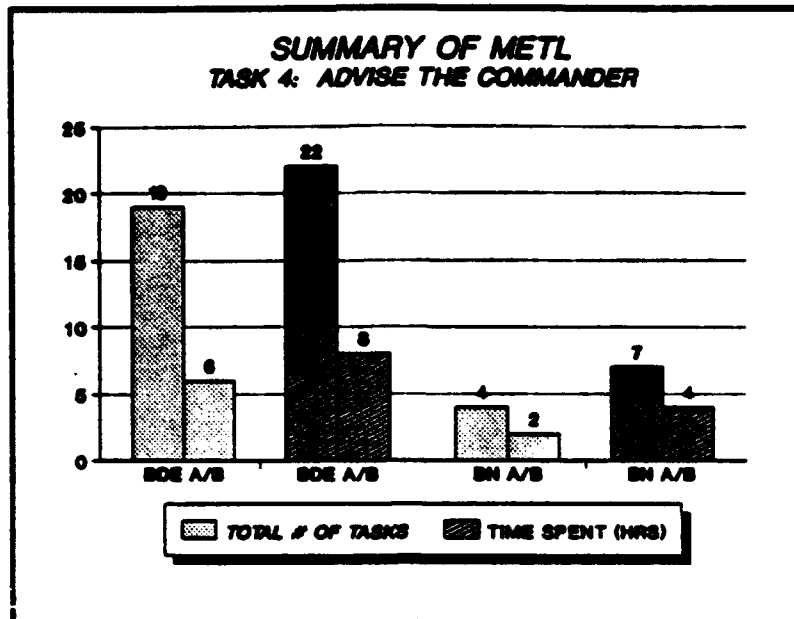


Figure 4  
SUMMARY OF METL 4

#### 18. OBSERVATIONS.

a. Logs indicate that UMTs without dedicated communication found themselves at the wrong place when meeting locations or times were changed. Some of these changes took place while the UMT was enroute without any communication equipment making it impossible to advise them of the changes.

b. UMTs with dedicated communication had the synchronization and agility that enabled them to advise the commander more effectively than UMTs without it.

**CHAPTER 5**  
**UMT QUESTIONNAIRE RESULTS**

1. **PURPOSE.** This chapter analyzes data gained from two questionnaires sent to chaplains and chaplain assistants serving at various positions from corps to BN.
2. I divided these questions according to the surveys (One and Two). Whereas these surveys are not intended to be definitive statistical instruments, the data is supportive of the objectives of this study.
3. All questions are shortened in the data summaries; however, complete questions may be seen at Appendix B.
4. The population for both surveys included chaplains and chaplain assistants at various positions and echelons (See Table 1).

**TABLE 5**  
**SURVEY POPULATION**

<b>ECHELON</b>	<b># OF RESPONDENTS</b>
Corps	27
COSCOM	7
MSC	18
DIV	11
BDE	62
BN	68

**SURVEY ONE**

1. This questionnaire was administered to Corps Staff Chaplains, Corps Support Command (COSCOM) Staff Chaplains, Major Subordinate Command (MSC) Staff Chaplains, and their Corps SGM and COSCOM NCOIC positions.
2. This survey was approved by the US Army Personnel Integration Command (USAPIC) on 25 October 1990. The survey administration dates were 1 November - 15 December 1990.
3. These survey populations were chosen because they represent primary leadership positions among nondivisional units in a corps.
4. All survey populations were small since the target positions were generally the highest or most responsible in the corps. Distribution of the questionnaire was as follows:
  - a. Questionnaires were sent to Active Duty (AD), Reserve (R), National Guard (NG), and Retirees (Ret.) who served/ are

serving in the positions.

b. Questionnaires were mailed to AD personnel in Europe, Continental U.S. (CONUS), Korea, and Saudi Arabia.

c. Seventy-five questionnaires were mailed, 51 were received (68%) (see Table 1 for distribution/results).

TABLE 6  
PERCENTAGES OF RETURNED QUESTIONNAIRES

Positions	Sent	Received	Percentage
Corps	14	13	92.9
COSCOM	8	7	87.5
MSC	34	18	52.9
SGM/NCOIC	22	13	59.1

Q. 1: Dedicated radio equipment would greatly enhance the accomplishment of my mission.

a. Responses	<u>Corps</u>	<u>COSCOM</u>	<u>MSC</u>
Strongly Disagree	0	1	1
Disagree	0	0	1
Neither	1	4	1
Agree	6	1	8
Strongly Agree	6	1	7

b. Analysis: The corps (92.3%) and MSC (83.3%) chaplains are overwhelmingly in strong agreement that such capability would greatly enhance the accomplishment of mission. However, the COSCOM respondents differ, with only 2 (28.6%) agreeing, 4 (57.1%) neutral and 1 (14.2%) strongly disagreeing. Overall the chaplains agree/strongly agree to the benefit of this equipment (29/38 = 76.3%).

Q. 2: My primary means of communication with UMTs will be . . .

a. Responses	<u>Corps</u>	<u>COSCOM</u>	<u>MSC</u>
Telephone	4	4	6
Radio	0	2	5
Courier	1	0	0
Electronic Message	3	0	5
Other	0	0	0

b. Analysis: Most chaplains use the telephone (14=46%); 7 (23%) use the radio; and 8 (26%) use electronic message as the primary means of communication. These results are predictable, since radio equipment is not assigned to the UMT section and UMTs generally have little experience in its use. It is interesting that 5 corps chaplains (38%) did not respond to this question. It may be that the greater number of radio and electronic messages used by MSC chaplains may be due to greater movement over the battlefield by these chaplains.

6. The following questions were part of the write-in section for corps staff chaplains.

Q. 3: What will be the most difficult area of your mission? (the numbers below represent the times each area was mentioned in the write-in portion of the questionnaire)

a. Area	Number of Times Mentioned
Communication with UMTs	7
Denominational Coverage	4
Monitoring the battlefield	3
Taking care of UMTs	3
Personnel assignments/replacements	2
Area Coverage	2
Support in mass casualties	1

b. Analysis: Seven respondents identified communication with UMTs as the most difficult area of their mission and three respondents identified monitoring the battlefield as the most difficult area of their mission. This clearly highlights the limitations of the communication equipment the UMT is authorized which only provides for static/land line communication.

7. The following questions were given to COSCOM Staff Chaplains.

Q. 4: Dedicated transportation will be essential for me to supervise subordinate supervisory UMTs.

a. Responses	<u>COSCOM</u>
Strongly Disagree	0
Disagree	0
Neither Agree/Disagree	1
Agree	1
Strongly Agree	5

b. Analysis: Very strong support for this position (6/7 = 85.7%); (5/7 = 71.4%) strongly agree).

Q. 5: How often will you communicate with other COSCOM staff chaplains?



**a. Responses**

**COSCOM**

Several Time a Day	0
Once a Day	2
Every Other Day	4
Weekly	1
Only in Emergencies	0

b. Analysis: Responses indicate a ready and frequent communication with MSC staff chaplains. Two (28%) state communication once a day while 4 (57%) state communication every other day, and 1 (14%) states communication weekly.

8. The following questions were given to MSC Staff Chaplains.

Q. 6: I will communicate with other MSC staff chaplains:

**a. Response**

**MSC**

Several times a day	1
Once a day	3
Every other day	3
Once a Week	7
Only in emergency	4

b. Analysis: Most responded once a week (7=38%). Responses were also registered for the other options. These answers indicate that MSC staff chaplains do not function in a vacuum but have a need to communicate with their colleagues.

Q. 7: What will be the greatest leadership challenge of the MSC staff chaplain?

**a. Response**

**MSC**

Communication with UMTs	6
Pastoring the UMTs	3
Monitoring and finding UMTs on the battlefield	4
Other Concerns	1

b. Analysis: Most chaplains (6/14=43%) identified communication with UMTs as the greatest leadership challenge, and (4/14=28%) identified monitoring and finding UMTs on the battlefield as the next greatest leadership challenge. Both of these challenges highlight the need of MSC UMTs for better (mobile) communication equipment.

8. The following questions were given to Corps SGMs:

Q. 8: Dedicated radio communications would greatly enhance job

accomplishment.

a. Response	<u>SGM</u>
Strongly Disagree	0
Disagree	0
Neither Disagree or Agree	2
Agree	6
Strongly Agree	7

b. Analysis: Strong support (13/15 ) agree/strongly agree, while only 2 were neutral. As stated before, communication with UMT remains one of the greater concerns which highlights the need for better communication equipment among the UMTs.

Q. 9: Dedicated tactical vehicle will be essential to my job accomplishment.

a. Response	<u>SGM</u>
Strongly Disagree	0
Disagree	1
Neither Agree nor Disagree	0
Agree	2
Strongly Agree	10

b. Analysis: The overwhelming majority (12/13=92%) agreed. Strong agreement was expected; however, to have even one disagree is puzzling.

Q. 10: What will be the greatest leadership challenge of your position?

a. Areas	<u>Number of Times Mentioned</u>
Monitoring morale and ministering to UMTs	3
Replacements of UMT personnel	3
Communication with UMT	3
Supervision and coordination with UMTs	3
Monitoring Unit Locations	2
Training	2
Applying commander's intent in RSP	1
Area coverage plan	1
Keep chaplain alive	1

b. Analysis: Three respondents (4.3%) identified communication with UMTs as the greatest leadership challenge they experienced. This emphasizes the difficulties UMTs have to keep in touch on the battlefield.

## SURVEY TWO

1. This survey was given to four combat divisions and two large chaplain conferences. Respondents represent 9.8% of the 1593 chaplains on active duty in 1989.
2. Since chaplains are assigned to all TOE units, surveys were presented at each level of assignment to reach an accurate cross section of grade structure.
3. Background.

Q.1: What is your level of assignment?

The total number of questionnaires administered were 151. Sixty-eight chaplains (45%) were assigned at battalion level; 62 chaplains (41%) at brigade level; 12 chaplains (8%) at division level; 9 chaplains (6%) at corps level.

Q.2: In what type unit do you serve?

All survey respondents were assigned to TOE units. This was very important since this is a battlefocus study. A list of all units represented by the survey population follows.

ARMOR	DISCOM
ABN CORPS	ENGINEERS
ABN MIL POLICE	INFANTRY
AIR DEF ARTY	MIL INTELL
ADJUTANT GENERAL	PSYOPS
ARTILLERY	SIGNAL
AVIATION	SPECIAL FORCES
CAVALRY	SPT GROUP
COMBAT SPT	SUPPLY & SERVICES
CORPS SUPPORT	TRANSPORTATION

Figure 5  
RESPONDENT ASSIGNMENTS

4. Transportation and communication questions.

Q.3: Do you have a dedicated MTOE vehicle?

a. Response	<u># Of Responses</u>
Have dedicated vehicle	94
Share vehicle	12
Get one as needed	18
Don't have use of vehicle	11

Not authorized	16
No answer	0

b. Analysis: Most respondents (94=62%) have dedicated vehicles. Eight (5%) share vehicle and 14 (9%) get one as needed (a commodity which may not be available on the battlefield.) Sixteen (10.6%) don't have use of any vehicle. Of sixteen respondents with no vehicle authorized, fifteen were assigned to battalions. The survey indicates that 35 (51.4%) of the battalion respondents do not have authorized vehicles. These results highlight the lack of transportation many UMTs face at battalion level which also have been raised in many after action reports. However, this problem is rooted in the MTOEs.

Q.4: Is your vehicle listed in the MTOE?

a. Response	<u># Of Responses</u>
Required but not authorized	33
Required and authorized	74
There is no requirement	40
No answer	4

b. Analysis: Thirty-three (22%) have vehicles required but not authorized. Seventy-four (49%) have vehicles required and authorized in accordance with AR 71-13. Forty (26.4%) have no requirement for a vehicle. Four (2.5%) did not answer this question.

Q.5: If you had a dedicated vehicle how often would you use it?

a. Response	<u># Of Responses</u>
Never	0
Seldom	3
Several times per day	148
No answer	0

b. Analysis: An overwhelming number of respondents (148=98%) would use the vehicle several times per day. As indicated by the respondents the UMT vehicle is used constantly in support of the religious support mission. Q.6: How does a dedicated vehicle affect mission performance?

Q.6: How would a dedicated vehicle affect mission performance?

a. Response	<u># Of Responses</u>
Greatly improve	135
Little improvement	5
No improvement	2
A hindrance	2
No answer	7

b. Analysis: Most respondents (135=89%) agree that dedicated vehicles greatly improve mission performance. Five (3%) responded little improvement and 2 (1.3%) no improvement in mission performance. Two (1.3%) considered transportation a hindrance. For UMTs assigned to light battalions or Airborne units vehicles can become a hindrance since the best way to accompany the units is on foot.

Q.7: How often do you use radio communications during a Field Training Exercise (FTX)?

a. Response	<u># Of Responses</u>
Never	52
Seldom	58
Once per day	21
Several time per day	20
No answer	0

b. Analysis: Fifty-two (34.4%) never use radio communication; however, 63 (41%) use it at least seldom and 21 (14%) use it once per day. These responses were expected as UMTs are not authorized radio equipment. These responses reflect that UMTs do have a need for communication as 99 (65%) respondents indicated they use radio communication at least seldom.

Q.8: Is a radio available for your use during FTX?

a. Response	<u># Of Responses</u>
I have a dedicated radio	15
Share with another section	44
Have one on an as needed basis	49
Have no access to a radio	32
No answer	11

b. Analysis: Fifteen (10%) have dedicated radios which normally are provided by the grace of the commander or the communications officer, since no authorization exists. Ninety-three (61.5%) have access to a radio on a share basis. Thirty-two (21%) have no access to a radio and 11 (7.2%) did not answer.

Q.9 How often would you use dedicated radio during FTX?

a. Response	<u># Of Responses</u>
Seldom	34
Never	8
Once a Day	31
Several times each day	76
No answer	2

b. Analysis: Sixty-five (43%) would use radio communication at least seldom or once a day. The majority (76=50%) would use radio communication several times each day. Eight never would and two did not answer. An overwhelming majority (141=93.3%) agreed they would use radio communication during an FTX. This indicates that UMTs recognized that there is a need among the UMTs for communication.

Q.10: How would dedicated radio affect the mission?

a. Response	<u># Of Responses</u>
Greatly improve	79
Little improvement	49
No improvement	7
A hindrance	9
No answer	7

b. Analysis: Most (79=52%) agree dedicated radio would greatly improve the mission. Forty nine (32%) responded little improvement, and 7 (5%) answer no improvement. Nine (6%) considers radio to be a hindrance for mission performance. Seven (5%) did not answer. Overall, 128 (88%) agree dedicated radio would improve mission performance.

9. Conclusions. Throughout the questionnaire, most UMTs at different levels agree that radio communication and dedicated vehicle would enhance their ability to perform the religious support mission. Based on these answers one must conclude that availability of this equipment can only place the UMT in a better position to serve the soldier.

## CHAPTER 6 DELIVERY OF RELIGIOUS SUPPORT

1. **PURPOSE.** This chapter explains how religious support is delivered to the soldiers at various echelons of the battlefield and its implications on the UMT's transportation and communication requirements.

### 2. DELIVERY OF RELIGIOUS SUPPORT.

a. It is easy to picture the UMT at one location on the battlefield where soldiers come to receive religious support. This picture is congruent with the garrison mode of operations where soldiers come to the post chapel to receive religious support. Contrary to the garrison setting, on the battlefield the UMT delivers the religious support to the soldiers where they live and work.

b. The effectiveness of the religious support mission is dependent upon the UMT's ability to coordinate with the units and travel to where soldiers and elements of the units are located. The greater the number of soldiers and the area of operation, the greater the requirements for mobility and communication.

c. The means necessary to deliver religious support vary depending on the echelon at which the UMT is assigned. Figure 6 provides a diagram which highlights the units and elements to whom the UMT deliver religious support at different echelons.

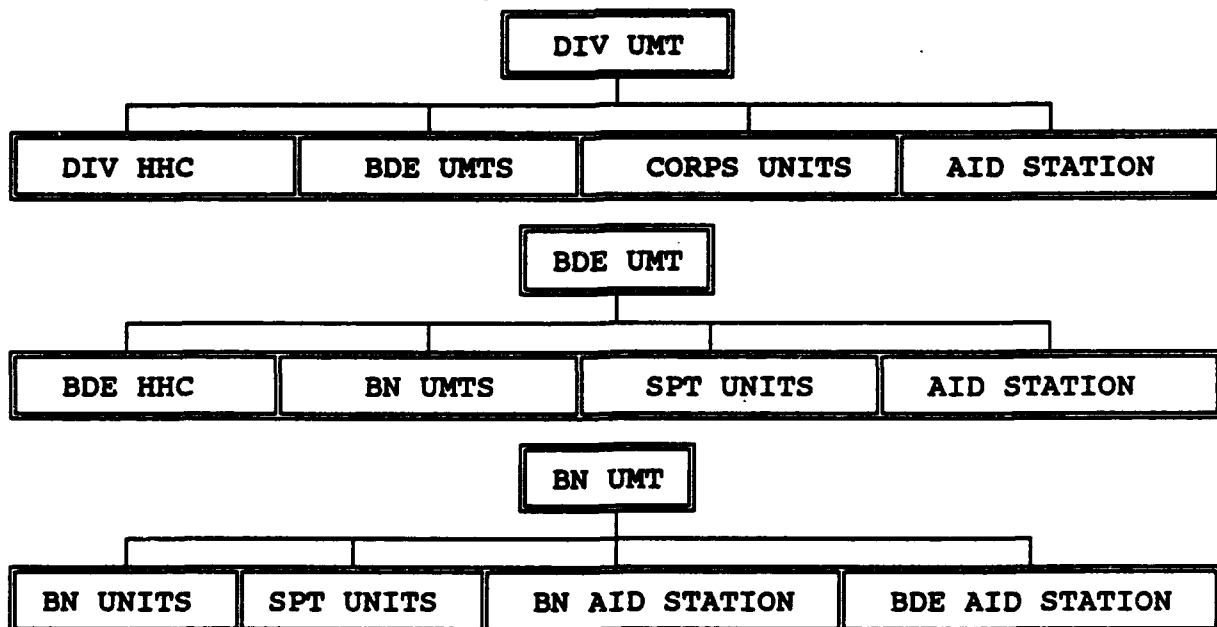


Figure 6  
DELIVERY OF RELIGIOUS SUPPORT AT VARIOUS ECHELONS

**d. Delivery of religious support at various echelons.**

**(1) The Division (Div) UMT delivers religious support to:**

- \*The Div Headquarters and Headquarters Company.**
- \*The Bde UMTs which involves visiting and sometimes counseling, and technical supervision.**
- \*Corps support units in the Div Area of Operation (AO).**
- \*Div Aid Station to the wounded and the staff.**

**(2) The Bde UMT delivers religious support to:**

- \*The Bde Headquarters and Headquarters Company.**
- \*The Bn UMTs which involves visiting, counseling, and technical supervision.**
- \*Div support units in the Bde AO.**
- \*Bde Aid Station to the wounded and the staff.**

**(3) The Bn UMT delivers religious support to:**

- \*The Bn units which vary depending on the type of Bn and task forcing.**
- \*Bde, Div and/or corps support unit in the Bn AO.**
- \*Bn Aid Station to the wounded and the staff.**
- \*Bde Aid Station to organic Bn soldiers.**

**3. TRANSPORTATION AND COMMUNICATION REQUIREMENTS TO DELIVER RELIGIOUS SUPPORT.**

**a. Tactical Vehicle.** The UMT, as an operational staff section for the commander, needs an assigned and dedicated tactical vehicle to deliver the religious support mission. Authorized transportation is required for the UMT's successful mission accomplishment. "Hitchhiking" is inadequate as the only means to move because in most cases, it leads to mission failure (see chapter 3). Organic transportation also ensures UMT integrity as both members of the UMT are able to travel together rather than being separated by the lack of space when hitchhiking.

**b. Communication Equipment.** The UMT must have dedicated, operational communications equipment to deliver effective religious support. The UMT must maintain radio contact with its unit as the UMT performs the religious support mission. Since the religious support requirements are not limited to specific places, other than to where the soldiers are, the vulnerability of the UMT is increased with the absence of voice communication. The UMT also monitors battlefield information such as locations of units and personnel, casualty reports, combat status of areas (red-green-red), and battle initiatives.



#### 4. EMERGING DOCTRINE AND DELIVERY OF RELIGIOUS SUPPORT.

a. Future warfighting concepts anticipate an intensely complicated and dynamic environment where mobility and synchronization will be essential for the UMT. Delivery of religious support in the future will be more difficult than under current ALB doctrine, for the following reasons:

(1) Wide dispersion of units and task organization. The UMT will be required to travel greater distances to reach widely dispersed units. Therefore, close coordination between UMTs to ensure general, as well as, denominational religious support will be necessary. In this environment, organic and mobile communication will be essential to deliver effective religious support. Mobility will be an important criteria for the UMT to perform its mission effectively. Although travel liberty for maneuver UMTs during maneuver phase may be extremely limited, it is expected that lack of dedicated transportation will severely limit the UMT in its ability to deliver religious support.

(2) The corps signal, engineer, air defense, military intelligence, and other corps units will be deployed forward and dispersed throughout the corps sector. In the TOE, these units have only a Bde UMT authorized which creates a religious support short-fall in the most lethal portion of the battlefield. Some implications are:

(a) Former religious support would have been provided by coordinating with divisional UMTs in the area; however, most of these units will remain in the Corps Rear areas in Tactical Assembly Areas (TAA) until the command is given to converge on a specific battle area. This resource for covering these corps non-divisional units will no longer be readily available.

(b) UMTs with transportation and communication equipment will be able to reach widely dispersed soldiers and overcome the problems of distance, mobility, coordination, and threat.

4. CONCLUSION. Religious support must be delivered to soldiers where they live and work on the battlefield. The UMT is the only instrument to deliver religious support. To deliver effective religious support, the UMT must have the capability to move and coordinate with its units on the battlefield.

**CHAPTER 7**  
**CONCLUSIONS AND RECOMMENDATIONS**

**1. CONCLUSIONS.** After reviewing feedback from historical documents, field surveys, interviews, and field experiments, the following were concluded:

a. Communication and mobility are essential for the success of the Religious Support mission.

b. Current communication equipment authorized for the UMT provides for static communication only. Although borrowed communication equipment may be available to the UMT, it does not provide mobile communication.

c. The UMT needs to have means of communication while traveling between elements on the battlefield. The lack of mobile communication increases the level of threat against the UMT and reduces its effectiveness to provide religious support.

d. The best configuration of mobile and static communication equipment for the UMT is:

(1) VHF-FM SINCGARS family of radios specially for UMTs in maneuver units within 20 km of enemy forces.

(2) MSE system which includes MSRT/DNVT for UMTs in units from maneuver battalion's main CP to the corps rear boundary.

e. According to the UMT mission and mobility requirements, the most applicable transportation alternatives for the UMT are:

(1) The HMMWV in maneuver units.

(2) The CUCV at all other echelons (if it remains in the inventory).

f. Current authorized transportation provides the UMT with sufficient mobility to provide effective religious support and respond to emergency situations on the battlefield. However, the UMT vehicle is identified as a staff transport vehicle with an ERC of B which places it in a low priority for deployment.

g. Hitchhiking proved to be ineffective as it does not provide the UMT the agility and synchronization needed to effectively respond to emergencies and normal religious support needs.

h. UMT vehicle and communication equipment must be compatible with the fuel and communication systems in the area of operation.

i. UMTs need more training on the use of MSE and SINCGARS to use effectively the equipment. Training should start at the Chaplain School and continue at local levels.

2. RECOMMENDATIONS. Based on these conclusions the following are recommended:

a. Identify the UMT vehicle as a functions vehicle in equipment requirements documents rather than a staff transport vehicle. This will place the vehicle in a higher priority for deployment.

b. Initiate procedures to change the status of the UMT vehicle from staff transport vehicle to functions vehicle.

c. Revise communication training at the Chaplain School to include MSE training, and conduct sustainment training at local levels.

d. Initiate procedures to authorize communication equipment as indicated in para "1. d."

3. COST FACTOR. The cost factor for these recommendations follows:

a. Recommendations "2. a" through "2. c" do not require additional assets. Therefore, minimal, if any, cost is involved to implement these recommendations.

b. To determine the cost factor for recommendation "2. d" the study writer used the 5 Division Notional Corps Laydown which has a total of 244 chaplains required. The MSRT is recommended for chaplains at echelons above maneuver battalion (178 total), and the SINCGARS for chaplains at maneuver battalion (66 total). The approximate cost to equip these chaplains with FM communication equipment is 13 M. The formula used to figure the approximate cost follows:

MSRT = 72,000.00ea \* 178 = 12,816,000.00

SINCGARS = 8,600.00ea \* 66 = 567,600.00

TOTAL COST = \$13,383,600.00

**APPENDIX A**  
**STUDY PLAN**

✓

**STUDY PLAN**  
**FOR**  
**UNIT MINISTRY TEAM**  
**COMMUNICATION AND TRANSPORTATION REQUIREMENTS**

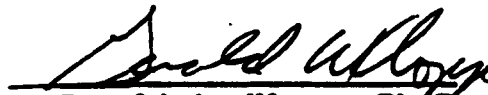
18 May 1989

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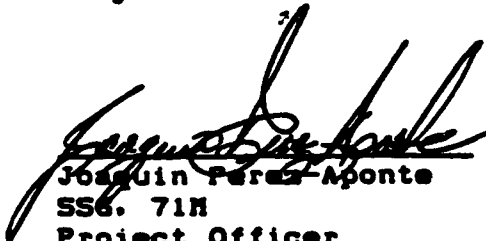
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**DEPARTMENT OF THE ARMY  
HEADQUARTERS US ARMY CHAPLAIN CENTER AND SCHOOL  
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**ATSC-DCD-CS**

**27 AUGUST 1990**

**SUBJECT: Study Plan: Unit Ministry Team Transportation and  
Communication Requirements on the Battlefield (ACN 084307)**

**SEE DISTRIBUTION:**

**1. PURPOSE.** To evaluate the transportation and communication requirements of the Unit Ministry Team (UMT) on the Airland Battlefield (ALB).

**2. REFERENCES.** See Enclosure

**3. TERMS OF REFERENCE.**

**a. PROBLEM STATEMENT.** The inadequate capability of the UMT to communicate and move between units on the battlefield severely limits the effectiveness of the religious support mission. There is no officially approved study which documents or evaluates the essentiality of transportation and communication equipment for the UMT on the battlefield. Present TOEs and MTOs do not authorize the UMT radio communication equipment for utilization during movement.

**b. IMPACT OF THE PROBLEM.** Without communication equipment and transportation the religious support is limited to soldiers in the immediate area where the UMT is located. Without communication and transportation the UMT loses the agility and timely synchronization necessary for mission performance. The commander's ability to immediately contact the UMT will be jeopardized and the UMT's ability to respond in timely fashion will be limited.

**c. OBJECTIVES.**

(1) To determine the communication and transportation requirements for the UMT in different force packages (e.g., Airborne, Light/Heavy, on the ALB).

(2) to examine the availability, capabilities and limitations of transportation and communication equipment to support the UMT requirements.

(3) To identify changes in doctrine, organizations, training, leader development, and materiel to overcome deficiencies identified in the Battlefield Development Plan (BDP).

d. SCOPE. The study will consider UMTs on the battlefield at every echelon from battalion to theater. The time frame for the study is current to 1993, and the force structure is TAA-93.

e. LIMITATIONS.

(1) This study will be limited to a battlefield environment.

(2) This study will utilize TRADOC approved analysis of threat doctrine.

(3) This study will utilized European and LATAM scenarios in the analysis process.

(4) Field observations/testing will be limited by local Command policies.

(5) Field observations/testing will be limited to UMTs assigned to heavy force packages.

f. ASSUMPTIONS.

(1) ALB doctrine will remain the Army war fighting doctrine.

(2) Forward Thrust will remain Army doctrine and applies to all echelons on the battlefield.

(3) Base communication capabilities will be available to the UMT on the ALB.

(4) the presence of the UMT with the soldier is a morale multiplies for the unit in combat.

g. ESSENTIAL ELEMENTS OF ANALYSIS (EEA)

(1) How does the threat impact the UMT communication and transportation needs?

(2) What are the missions of the UMT on the ALB?

(3) How do the missions of the UMT determine communication and transportation requirements?

(4) What essential information must be transferred to and from UMTs in terms of quantity, priority, classification, perishability/speed of service required, type, and frequency?

(5) Who is the UMT sender and receiver of information?

(6) How will the UMT deliver religious support on the ALB?



(7) How does dedicated transportation and communication equipment impact the UMT's ability to perform their missions to standards?

(8) What dedicated communication and transportation equipment is authorized in TOEs?

(9) What are the limitations and how compatible is the UMT transportation and communication equipment on the battlefield?

(10) What type transportation and communication equipment have the UMTs used in the past?

(11) How does the Commander's need to communicate with the UMT affect transportation and communication requirements?

(12) What transportation and communication equipment does the UMT requires to provide effective religious support in a battlefield environment as portrayed by the LOGCEN Notional Corps Laydown (e.g., unit dispersion and types)?

(13) How does Army doctrine impact the UMT communication and transportation requirements?

(14) How do the requirements of this study relate to the Battlefield Operation System?

(15) What are the opportunities, limitations and availability of using non-dedicated communication equipment?

(16) What are the implications of this study for changes in doctrine, organization, training, leader development, and materiel?

#### **h. CONSTRAINTS.**

(1) Manpower for this effort should not exceed levels delineated under para 5.

(2) TDY Funds for Study Advisory Group will be constrained to local funding.

(3) Shortage of assigned personnel limits manpower resources.

#### **i. ALTERNATIVES.**

(1) A dedicated staff vehicle and authorization of a telephone set for base operations are current transportation and communication means for the UMT on the battlefield.

(2) The study NCO conducted a front end analysis of the equipment and transportation available to the UMT to determine the second alternative. Based on the analysis the configuration of the second alternative is:

A dedicated operational functions vehicle and manpack/vehicle mounted dedicated VHF/FM communication equipment.

j. MEASURES OF EFFECTIVENESS (MOE). A comparative analysis using the ratio (cardinal) scale will be completed to evaluate religious support by UMTs on the battlefield in terms of the number, timeliness and ratios of the UMT METL (e.g., religious services, emergency ministrations, pastoral care and unit visitations).

k. METHODOLOGY.

(1) The first step will be to identify and assess how the threat impact UMT communication and transportation requirements.

(2) The next step will be a thorough literary review to determine relevant historic data and future perspectives.

(3) The next step will be to conduct a field test during a field training exercise at the National Training Center. This test will be a comparative analysis using the ratio (cardinal) scale to assess the ability of the UMTs with (alternative 2) and without (alternative 1) communication equipment and transportation under similar tasks, conditions and standards to provide religious support on the battlefield. This step will evaluate the impact of transportation and communication equipment on the mission of the UMT.

(4) The study will then recommend changes, if necessary, in doctrine, organization, training, leader development, and materiel.

l. MODELS. None

m. RELATED STUDIES.

(1) ACN 044666 "Chaplain Support to the Maneuver Battalion."

(2) ACN 064346 "Unit Ministry Team Religious Support to Casualties on the AirLand Battlefield."

(3) ACN 084307 "Survivability of the Unit Ministry Team on the battlefield."

(4) ACN 057970 "MOS 71M Support to Tactical Organizations."

(5) ACN 073980 "UMT Minimum Essential Materiel Requirements for the Battlefield."

(6) "PSS Battlefield Communication Study."

(7) "Battlefield Laydown Corps Communication Study."

#### 4. THREAT AND OPERATIONAL ENVIRONMENT.

The ALB is predicated upon a multi-dimensional battlefield. The battlefield environment will consist of massed attacks in every sector of the battlefield maximizing stress, shock, and confusion. Soldiers will be pressed beyond normal endurance resulting in deep spiritual and psychological needs thereby placing great demand on the UMT. Communication will be a key factor in the ability of our forces to maintain the initiative, agility, depth, synchronization, and endurance. In accordance with Forward Thrust doctrine the UMT comprehensive religious support to all soldiers and it will be affected by the threat with the same lethality as other combat units. Threat studies indicate UMT/chaplain to be a target for threat.

5. SUPPORT REQUIREMENTS. The estimated support required for this study is: FY 89 - .7 Professional Staff Year (PSY); FY 90 - 1.0; total PSY - 1.7.

#### 6. MILESTONE SCHEDULE.

01 Apr 1989	Submit Study Plan
10 May 1989	Coordinating SAG meeting at USACHCS
Nov 1989	Test of the Analytical Instrument
May 1990	Field Test at NTC (alternative one)
Aug 1990	SAG in progress review
Nov 1990	Field test at NTC (alternative two)
Jan 1991	Analysis of Data from Field Test
Mar 1991	Complete analysis and staff with DACH
May 1991	Study ending SAG
Jul 1991	Completion date for study report

#### 7. STUDY ADVISORY GROUP.

Ch (COL) John Hannah, ATSC-DCD, USACHCS, Fort Monmouth, SAG Chairman

Ch (LTC) Gilbert Pingel, DACH-PPDT, Office of the Chief of Chaplains, Washington, DC, Member

Ch (MAJ) Larry Walker, ATSC-DCD-CS, USACHCS, Fort Monmouth, NJ, Sponsor Study Director

Ch (MAJ) John Patrick, ATSC-DCD-OM, USACHCS, Fort Monmouth, NJ, Member

Ch (MAJ) Greg W. Hill, SCC, Fort Ben Harrison, IN, Member

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Mr. Jan Moren, AMSEL-RD-ASCD-SC, CECOM, Fort Monmouth, NJ,  
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SFC Melvin Woodard, ATSC-DMM, USACHCS, Fort Monmouth, NJ,  
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SFC Jack V. Huggins, ATSC-DCD-OM, USACHCS, Fort Monmouth, NJ,  
Member

SFC Joaquin Perez-Aponte, ATSC-DCD-CS, USACHCS, Fort  
Monmouth, NJ, Study Writer

**APPENDIX B  
QUESTIONNAIRE**

1. Dedicated radio communication equipment would greatly enhance the accomplishment of my mission.

- A. STRONGLY DISAGREE
- B. DISAGREE
- C. NEITHER DISAGREE NOR AGREE
- D. AGREE
- E. STRONGLY AGREE

2. My primary mean of communication with subordinate UMTs will be through. . .

- A. TELEPHONE
- B. RADIO
- C. COURIER
- D. ELECTRONIC MESSAGE
- E. OTHER

3. What will be the most difficult areas of the corps staff chaplain mission during combat: (write answer in Write-In Are 2 on answer sheet)

4. A dedicated tactical vehicle will be essential for me to supervise subordinate supervisory UMTs and provide religious support for assigned nondivisional units during combat.

- A. STRONGLY DISAGREE
- B. DISAGREE
- C. NEITHER DISAGREE NOR AGREE
- D. AGREE
- E. STRONGLY AGREE

5. How often will you communicate with other COSCOM staff chaplains?

- A. SEVERAL TIMES A DAY
- B. AT LEAST ONCE A DAY
- C. ABOUT EVERY OTHER DAY
- D. ABOUT WEEKLY
- E. ONLY IN AN EMERGENCIES

6. During combat I will communicate with other corps MSC staff chaplains:

- A. SEVERAL TIMES A DAY
- B. ONCE A DAY
- C. EVERY OTHER DAY
- D. WEEKLY
- E. ONLY IN EMERGENCIES

7. Your greatest leadership challenge as MSC staff chaplain during

combat will be: (write answer in Write-in Area 2 on answer sheet.

8. Dedicated radio communication equipment would greatly enhance my ability to fulfill my duties throughout the corps or COSCOM areas.

- A. STRONGLY DISAGREE
- B. DISAGREE
- C. NEITHER DISAGREE NOR AGREE
- D. AGREE
- E. STRONGLY AGREE

9. Dedicated tactical vehicle will be essential in fulfilling my duties throughout the corps or COSCOM areas.

- A. STRONGLY DISAGREE
- B. DISAGREE
- C. NEITHER DISAGREE NOR AGREE
- D. AGREE
- E. STRONGLY AGREE

10. Your greatest leadership challenge as corps SGM or COSCOM NCOIC during combat will be: (write answer in Write-In Area 2 on answer sheet)

#### SECTION B

1. What is your level of assignment?

- A. BATTALION
- B. BRIGADE
- C. DIVISION
- D. CORPS

2. In what type unit do you serve?

- A. LIGHT INFANTRY
- B. INFANTRY
- C. MECHANIZED
- D. ARMOR
- E. OTHER, SPECIFY \_\_\_\_\_

3. Do you have a dedicated MTO&E vehicle for your UMT?

- A. I HAVE A DEDICATED VEHICLE
- B. I SHARE VEHICLE WITH ANOTHER SECTION
- C. I GET VEHICLE ON AN "AS NEEDED BASIS"
- D. I DON'T HAVE USE OF ANY VEHICLE
- E. WE ARE NOT AUTHORIZED A VEHICLE BASED ON UNIT MISSION

4. In your unit's MTO&E documents, is there a vehicle listed in the required and authorized column (s)?

- A. VEHICLE IS REQUIRED BUT NOT AUTHORIZED
- B. VEHICLE IS REQUIRED AND AUTHORIZED
- C. THERE IS NO REQUIREMENT

5. If you have a dedicated vehicle, how often would you use it during a field exercise?

- A. NEVER
- B. SELDOM
- C. SEVERAL TIMES PER DAY

6. If you had a dedicated vehicle, how would its use affect the performance of your mission?

- A. GREATLY IMPROVE
- B. LITTLE IMPROVEMENT
- C. NO IMPROVEMENT
- D. IT WOULD BE A HINDRANCE

7. How often do you use radio communications when on a field exercise?

- A. NEVER
- B. SELDOM
- C. ONCE PER DAY
- D. SEVERAL TIMES EACH DAY

8. Is a radio available for your use on field exercises?

- A. MY UMT HAS A DEDICATED RADIO
- B. I SHARE WITH ANOTHER SECTION
- C. I HAVE A RADIO ON AN "AS NEEDED BASIS"
- D. I HAVE NO ACCESS TO A RADIO

9. If you had a dedicated radio, how often would you use it on field exercises?

- A. SELDOM
- B. NEVER
- C. ONE PER DAY
- D. SEVERAL TIMES EACH DAY

10. If you had a dedicated radio, how would it affect the performance of your mission?

- A. GREATLY IMPROVE
- B. LITTLE IMPROVEMENT
- C. NO IMPROVEMENT
- D. IT WOULD BE A HINDRANCE

## APPENDIX C FIELD EXPERIMENT

1. **PURPOSE.** This appendix explains the development of the field experiment used to measure the effectiveness of each alternative in the study and provide the necessary data required to feed the Communication Data Base (CDB). For a definition of the CDB see paragraph 2, d (5).

### 2. THE FIELD EXPERIMENT.

a. The study writer developed a field experiment to measure the impact of communication and transportation on the Unit Ministry Team's (UMT) ability to perform its mission.

b. The sources used to develop the experiment were:

(1) A meeting within the Directorate of Combat Developments, US Army Chaplain Center and School (USACHCS), Ft. Monmouth, NJ, to discuss the Mission Essential Task List (METL).

(2) TRADOC PAM 11-9, The Blueprint of the Battlefield.

(3) The Capability Issue Package of FY 89 Battlefield Development Plan (BDP).

(4) The data elements in the Communication Data Base (CDB).

c. The experiment employs a generic religious support METL, which is incorporated in TRADOC PAM 11-9. The design calls for UMTs in two heavy brigades to follow the METL during field training exercises (FTX). The UMTs in each bde are equipped according to the alternative they represent. After the completion of the exercises, a comparative analysis of the two alternatives is performed to determine the impact of each alternative.

d. Following is an explanation of the experiment:

(1) The four tasks that compose the METL are:

- (a) Provide/Perform worship services;
- (b) Provide/Perform emergency ministrations;
- (c) Provide/Perform Pastoral Care and;
- (d) Advise the Commander.

(2) Each task is divided into sub-tasks which the UMT



performs to accomplish the METL. Following each task are instructions which help the observer record the information.

(3) As the UMT performs each task, the following information is recorded in the METL log:

- (a) DATE: current day.
- (b) TASK: task # and letter of sub-task performed.
- (c) QUANTITY: How many times was the task performed?
- (d) SOLDIERS: For how many soldiers was the task(s) performed?
- (e) TIME: Length of time to perform the task, including travel time.
- (f) UNIT: Unit to which the services were provided.
- (g) GENERAL RELIGIOUS SUPPORT (GRS): Were services provided to units other than unit of assignment?
- (h) DIRECT RELIGIOUS SUPPORT (DRS): Were services provided to unit of assignment only?
- (i) COMMUNICATION: Was communication used in support of the task?
- (j) TRANSPORTATION: Was transportation used in support of the task?

(4) To record the exercise data, two logs are used as data collection instruments. The first log records data related to the METL; the second which contains two areas, transportation and communication, records the trips and communications of the UMT throughout the exercise.

(5) The transportation and communication logs capture the information necessary to feed the Communication Data Base (CDB). The CDB is a data base which represents communications requirements of selected organizations. The communication requirements within the CDB are depicted in terms of needlines. A needline is a series of related information data elements which describe a requirement to communicate information between two or more battlefield communicators.

(6) As the UMTs move and communicate to perform their mission, the following information is recorded on the transportation and communication log to meet the CDB data elements:

**Under the transportation portion:**

-DATE:	Current day
-TRIP#:	Number of trip of the day
-MEANS OF TRANS:	Means of transportation used by UMT
-DIST KM:	Distance in Kilometers
-TIME FROM/TO:	Time from departure to arrival
-WHO DROVE:	Chaplain or Chaplain Assistant
-PURPOSE OF TRIP:	Purpose why the trip happened
-PROBLEMS ENCOUNTERED:	Self explanatory

**(b) Under the communication portion:**

-MEANS USED:	Type of equipment used
-SEND ID:	Who sent the message?
-SEND MOB:	Is the sender stationary or moving?
-REC ID:	Who received the message?
-REC MOB:	Is the receiver stationary or moving?
-DIST KM:	Distance between sender and receiver in kilometers
-CLASS LEVEL:	Was the message top secret, secret, classified, or unclassified?
-CRIT:	How important was the message in relationship to the mission?
-SPEED OF SERVICE:	Maximum amount of time allowed for message to be received
-NET USED:	Net used to communicate
-LENGTH OF TRANS:	Length of time using the net

e. Upon completion of the field test, the logs are analyzed and compared to measure the impact of each alternative on the UMT's ability to perform the mission.

f. ORGANIZATION OF DATA: The following tables are examples of how the data may be organized and summarized:

(1) The information from the METL log:

**TABLE 7**  
**TASK: PROVIDE PERFORM WORSHIP SERVICES**

UMT	TASK	UNIT	QTY	TIME	KM	COMMO	TRANS
BDE	1a	HHC	1	2.5	25	N	Y
AR BN	1a	A CO	2	5.6	35	Y	Y
FA BN	1a	C CO	1	8.9	45	Y	N
FSB	1a	HHC	1	1.8	05	Y	Y

**LEGEND**

- UMT: UMT performing the task
- TASK: Task and sub-task performed
- UNIT: Unit to which performed
- QTY: How many times is the task performed
- TIME: Average amount of time used to perform the task
- KM: Average amount of kilometers traveled to perform the task
- COMMO: Was communication used in support of the task?

(2) The information from the transportation and communication log:

**TABLE 8**  
**TRANSPORTATION**

UMT	#TRIPS	KM	TIME	PURPOSE	MEANS
BDE	61	345	45hr	1/3/5	1
ARMOR	70	356	39hr	1/3	1
FA BN	45	289	28hr	1/3/5	1
FSB	23	221	25hr	1/3/4	1

**LEGEND**

- UMT: UMT using the transportation
- #TRIPS: Total number of trips made during the exercise
- KM: Total number of Kilometers traveled
- TIME: Total time spent in transportation
- PURPOSE: Purposes for the trips
- MEANS: Type of transportation used

TABLE 9  
COMMUNICATION

UMT	MEANS	#COMMO	CLASS	SPEED	NET	LENGTH	CRIT	PURPOSE
BDE	Radio	67	U/C	7m	A/LOC	1.5m	I	1/3/4
AR BN	Radio	45	U/C	7m	"	1.5m	I	1/2/4
FA BN	Radio	25	U/C	4m	"	2.5m	I	1/3/5
FSB	Radio	18	U/C	6m	"	2.0m	I	1/2/3

**LEGEND**

- UMT: Identification of the UMT
- MEANS: Type of communication equipment
- #COMMO: Total number of communications
- CLASS: Average classification level
- SPEED: Average time in minutes allowed for message to be received
- NET: Net used
- LENGTH: Length of time in the net (minutes)
- CRIT: Criticality of message in relation to the mission.
- PURPOSE: Reason for the transmission.

### 3. THE TEST OF THE FIELD EXPERIMENT.

a. In order to ensure that the experiment is functional and will provide the data needed, the Directorate of Combat Developments, USACHCS, selected a brigade with UMTs assigned to test the experiment. Three NCOs and an officer from USACHCS, went to the training site in November 1989 to observe/record information during a bde sized FTX. Hereafter, the testing of the experiment will be referred to as "the test."

b. The Command equipped each bde UMT according to the second alternative (with radio and transportation) and provided limited training on the operation of the equipment (especially radios which are not commonly used by the UMTs).

c. The UMTs that participated and the equipment they used are depicted in Table 4 as follows:

TABLE 10  
UMTS AND EQUIPMENT

UMT	VEHICLE	RADIO
BDE STAFF	CUCV	PRC-77 VRC-524
ARMOR BN	CUCV	VRC-524
FA BN	CUCV/PICK-UP	PRC-77
FSB	CUCV	PRC-77

d. The FTX lasted 30 days during which the UMTs recorded data in the transportation and communication log. However, the primary part of the exercise was the bde operations (3 days in duration) during which the test was conducted. An observer/recorder accompanied each UMT and recorded the information in the logs as each executed the METL.

### 4. RESULTS OF THE TEST.

a. The test resulted in a number of changes and additions to the METL and the logs. Appendix B contains the revised METL and logs. Following are the changes, additions, and a justification for the changes:

(1) The experiment: Based on the test, the following changes were made to the METL:

(a) Under task #1, "Provide/Perform Worship Services", sub-task 1-d, "Coordinate religious support for other UMTs" was added. It became obvious to the observer with the bde Staff UMT that this sub-task was very important as the bde UMT coordinated denominational services for subordinate UMTs. Additionally, UMTs at Bn level spent considerable time coordinating these services.

(b) Under task #3, "Provide/Perform Pastoral Care", sub-task 3-b, "Visit all units or elements geographically separated (with different perimeters). This was changed to read: "Visit units/elements, and UMTs geographically separated (with different perimeters). This was another task performed by the bde Staff UMT which was not included in the METL.

(c) Under task #3, "Provide/Perform Pastoral Care", sub-task 3-c, "Provide battle fatigue ministry through identification and intervention for traumatized soldiers in all unit areas" was added. One case of battle fatigue counseling was experienced at bde and several others at Bn level.

(d) Under task #4 "Advise the Commander", sub-task 4-b, "Attend/brief Commander staff meeting" the phrase "UMT Meetings" was added to read: "Attend/brief Commander staff meeting and/or UMT meetings. UMT coordination meetings were very important to the exercise.

(2) The Logs: Based on the test, the following changes were made to the logs:

(a) The METL log was changed as follows:

\*Soldiers column was deleted as this information was not critical for the experiment.

\*GRS and DRS columns were deleted as this information can be determined by the unit column.

\*A comments column was added to provide room for relevant and important information.

(b) Instead of having two separate logs they were combined into one which was enlarged to 8 1/2" x 11" (See page D-3). This improved the handling of the logs and reduced the possibility of losing them.

(c) No changes were made to the transportation log except for the format and size. The number of columns and information requested remained the same.

(d) The communication log was changed as follows:

\*A column to number the transmissions was added. This facilitates referencing any particular communication at the bottom of the page.

\*Sender and receiver mobility columns were deleted as it was difficult to determine this information.

\*The Distance column was deleted as locations could not be discussed over the radio.

\*Criticality and Speed of Service columns were deleted as most of the UMTs had difficulty in understanding the terms. However, this information can be determined from other data elements in the logs.

\*A purpose column was added to describe the reason for the communication.

\*A results column was added to annotate the result of the communication (i.e., was it accomplished)

### c. Problems Encountered

#### (1) Equipment

(a) Three of the UMTs were equipped with PRC-77 radios. This radio has a short range (about 5-8 kms) which severely limited the communication capabilities of the UMTs. After the first day the bde UMT was able to exchange this radio for a VRC-524 which made it possible to communicate with other UMTs and units within a 20 kilometers radius.

(b) The FA UMT was equipped with a pick-up truck with the radio mounted in the bed behind the cabin. Although having the equipment aided them in providing religious support, they complained that to change frequencies they had to stop the vehicle, go to the back and change the frequency, thus discouraging frequent use.

(c) The lack of secure communication prevented the UMTs from getting essential information about units requesting religious support.

(d) Only the bde staff UMT possessed a Communication- Electronic Operations Instruction (CEOI). The other UMTs obtained one after the exercise began or acquired the information daily. This seriously limited the communication capabilities of the teams as the CEOI contains the call signs and frequencies on any given day of the units on the battlefield.

(2) Training. The Division Staff UMT arranged the communication training for the bde UMTs. The training was conducted in a class room setting and did not involve any hands-on techniques. The lack of this training contributed to the UMTs initial hesitation to use the equipment; however, after the first day the level of confidence increased.

APPENDIX D  
METL AND DATA COLLECTION INSTRUMENTS

1. The purpose of this appendix is to provide an example of the revised Mission Essential Task List (METL) and the logs utilized in the field experiment as explained in Appendix A.
  2. Following are the revised METL and logs used for the test. Revisions to the METL are highlighted in bold and underlined. (Paragraph numeration in the following METL is the same as it was during the test.)
- 

FIELD TEST FOR  
THE COMMUNICATION AND TRANSPORTATION STUDY  
GENERIC METL

1. PROVIDE/PERFORM WORSHIP SERVICES.
  - a. Perform direct religious support (DRS).
    - Conduct collective worship service at unit locations.
  - b. Perform or provide for general religious support (GRS) to meet the special needs of distinctive faith groups.
    - Conduct collective worship service for units without UMT.
    - Perform distinctive faith worship service.
    - Coordinate distinctive faith worship service.
  - c. Perform appropriate rites, ordinance, sacraments, and ministrations.
  - d. Coordinate religious support for other UMTs.
  - e. Request ecclesiastical supplies.
    - \*\*RECORD THE AMOUNT OF TIME FROM THE TIME OF REQUEST TO THE TIME OF DELIVERY.
  - f. Request UMT personnel replacement. This situation will be simulated between Bde UMT and Bn S-1.
    - \*\*RECORD:
      - The time it takes for the Bde UMT to become aware of the loss. S-1 at one of the Bns will notify UMT at Bde about the loss of the Bn UMT.
      - What communication or transportation assets are utilized to coordinate religious support for the Bn?
2. PROVIDE/PERFORM EMERGENCY MINISTRATIONS.
  - a. Conduct memorial/funeral services in units suffering casualties. This task will be performed by UMTs in units that have suffered casualties only.



**\*\*RECORD THE NUMBER OF SERVICES CONDUCTED, AMOUNT OF TIME REQUIRED TO PERFORM THE TASK, AND UNITS VISITED. A VISIT TO A SQUAD/PLATOON IN A SEPARATE LOCATION IS CONSIDERED ONE VISIT.**

b. Perform/provide prayers, rites and sacraments to casualties and wounded soldiers. This task will be performed by UMTs in units that have suffered casualties only.

c. Perform/provide service for mass hasty burials. This task will be performed only if it is included in the overall scenario.

d. Respond to a mass casualty situation. This task will be performed if it is included in the overall scenario.

**\*\*RECORD THE AMOUNT OF TIME REQUIRED TO RESPOND FROM THE TIME THE SITUATION HAPPENED AND THE NUMBER OF CASUALTIES SEEN BY THE UMTs.**

**3. PROVIDE/PERFORM PASTORAL CARE.**

a. Provide counseling for soldiers in all units or elements geographically separated (with different perimeters).

b. Visit units/elements and UMTs geographically separated (with different perimeters).

c. Provide battle fatigue ministry through identification and intervention for traumatized soldiers in all unit areas.

**4. ADVISE THE COMMANDER.**

a. Advise Commander on morale, morals and spiritual welfare of the unit.

b. Attend/brief Commander staff meeting and/or UMT meetings.

**INFORMATION SHEET  
FOR THE  
METL LOG**

**DATE** = Current day

**TASK** = Task # and letter that was executed (e.g., 1b)

**QTY** = How many times was the task performed

**TIME** = Length of time to perform the task including travel time if any

**UNIT** = Unit to which services were provided

**COMMO** = Mark here if communication was used in support of the task

**TRANS** = Mark here if trans was used in support of the task

**COMMENTS:** State problems, suggestions, questions, etc.

DATE	TASK	QTY	*TIME	UNIT	COMM	TRANS	**COMMENTS

INCLUDE TRAVEL TIME IN THE FIRST TASK PERFORM BY UMT.

NOTE PECULIARITIES THAT IMPACT ON THE TASKS:

\*\*This column was added to the original log.

\*\*\*The Soldiers, GRS, and DRS columns were deleted from the original log. (See Appendix A for explanations)

---

**INFORMATION SHEET  
FOR  
THE COMMUNICATION LOG**

Following are step by step instructions on how to fill out the communication log to be used during the field training exercise at NTC.

**COMMUNICATION LOG KEYS**

**DATE =** Current day  
**MEANS USED =** Means of communication used by the UMT. List according to the key sheet  
**SEND ID =** Sender Identification (i.e., Chaplain, Ch Asst)  
**REC ID =** Receiver identification (i.e., Bde Ch, A Co Cmdr)  
**DIST KM =** Distance in kilometers. (1 mile = 1.6 km)  
**CLASS LEVEL =** Follow key sheet  
**NET USED =** Which net was used to communicate  
**LENGTH OF TRANS =** The length of transmission from the time you enter to the time you exit the net

## KEY FOR COMPLETING COMMUNICATION LOG

**MEANS-**

Field Radio = FR  
Land Line = LL  
Message Center = MC  
Courier = C  
Distribution = D  
Other (list)

**PURPOSE** (use #)

1. Radio Check
2. Coordinate Rel Spt
3. Req Unit Location
4. Emergency (explain)
5. Other (list)

**CLASS LEVEL**

Unclass = U  
Classify = C  
Secret = S  
T-Secret = TS

NOTES: 1.6 KM equal 1 mile (10 miles = 16 Km)  
Under results write "neg contact" when receiver does  
not answer your transmission.

# COMMUNICATION LOG

**DATE** \_\_\_\_\_

[illegible]

\*NOTES: (USE # ON LEFT MARGIN AS REFERENCE)  
 \*\*These columns were added to the original log.  
 \*\*\*Sender and Receiver Mobility, Distance, Criticality and Speed  
 of Service columns were deleted from the original log. (See  
 Appendix A for explanation.)

---

**INFORMATION SHEET  
FOR  
THE TRANSPORTATION LOG**

Following are step by step instructions on how to fill out the trans log to be used during the field training exercise at NTC.

**TRANSPORTATION LOG KEYS**

**DATE -** Current day

**MEANS OF TRANS -** Means of transportation used by the UMT. List according to the key sheet.

**DIST KM -** Distance in kilometers. (1 mile = 1.6 km)

**TIME FROM TO -** Time from departure to arrival

**WHO DROVE -** Chaplain or Chaplain Assistant

**PURPOSE OF TRIP -** See choices in the key sheet. You may list more than one reason for one trip

**PROBLEMS ENCOUNTERED -** Problems you encountered in trying to arrive at your destination. You may use the back of the sheets to explain in more detail what happened.

### KEY FOR COMPLETING TRANSPORTATION LOG

## MEANS

1. UMT Assigned
2. Borrowed
3. Air
4. Hitch-Hicking
5. Walking
6. Other, List

**PURPOSE OF TRIP**

1. Accompany Unit
2. Conduct Svcs
3. Attend Staff Mtg
4. Visit Aid Station
5. Unit Coverage
6. General Rel Spt
7. Other. List

**NOTE: 1 mile equal 1.6 km (10 miles = 16 Km)**

## TRANSPORTATION LOG

**DATE:** \_\_\_\_\_

[illegible]

**\*NOTES: (USE # ON LEFT MARGIN AS REFERENCE)**

**\*\*The transportation log was unchanged from the original.**

3. For more information about the changes that were made to the METL and the logs see Appendix C, para 4.

**APPENDIX E**  
**FIELD EXPERIMENT ANALYSIS**

1. **PURPOSE.** This appendix presents the analysis of the field experiment conducted at NTC to measure the impact of communication and transportation on the ability of the UMT to perform the religious support mission.

2. **OVERVIEW.**

a. **Analysis Procedure.** The analysis is divided in two parts as follows:

(1) TAB A is a detailed summary of the UMT performance in each sub-task of the METL and summarizes the results to determine the impact of dedicated equipment on the UMT's ability to perform the specific religious support mission tasks.

(2) TAB B is a summary of the communication and transportation logs. This summary reflects the purpose of each communication and trip made by the UMT and compares each UMT to determine the impact of dedicated communication and transportation on its ability to do the mission.

b. **Participant composition.**

(1) Two brigades participated in the test each composed of two Infantry/Armor Battalions, one Forward Support Battalion, and a Field Artillery slice. However, the analysis considered only the two brigade staff UMTs and two Infantry (Mechanized) battalion UMTs.

(2) The other units within the brigades were not included in the analysis for the following reasons:

-One of the battalion chaplains was a Catholic priest. Therefore, this battalion UMT was unique and not comparable since its mission included General Religious Support of providing Catholic coverage for all the brigade units.

-The other battalion UMT was not considered because the chaplain was newly assigned and had not received adequate instruction in how to complete the logs.

-The Forward Support Battalion (FSB) chaplain in the first phase of the experiment at NTC was also newly assigned and had not received adequate instruction in how to complete the logs. Therefore, there was no basis for comparison.

-Neither of the Field Artillery UMTs were equipped with dedicated communication; therefore, there was no basis for comparison.

(3) Therefore, the analysis considered two similar BDE Staff UMTs and two BN UMTs only. Although the other UMTs were not considered, those considered provide a good sample for the following reasons:

- both units were organized the same
- same type of exercise (NTC)
- all chaplains were protestant
- all received the same training for the experiment
- two echelons of the battlefield were compared

(4) For the purpose of the analysis the Bde and Bn UMTs with dedicated communication and transportation are identified as BDE/A and BN/A, while Bde and Bn UMTs with transportation only are identified as BDE/B and BN/B.



**TAB A**

# **ANALYSIS OF METL ACCOMPLISHMENTS FIELD EXPERIMENT**

**TABLE 11**  
**TASK: 1a Direct Religious Support (worship service)**

UMT	UNIT	QTY	TIME	COMMO	TRANS
BDE/A	HHC	2	2.3	D	D
BDE/B	HHC	2	3.5	ND	D
BN/A	BN	5	2.4	D	D
BN/B	BN	5	1.5	ND	D

**LEGEND:**

**UMT:** Performing task. BDE/A and BN/A represent UMTs with communication and transportation. BDE/B and BN/B represent UMTs with transportation only.

**UNIT:** For whom task was performed

**QTY:** # of times task was performed

**TIME:** To perform task, including travel time in hours

**COMMO/TRANS:** Indicates if either one was used in support of this task. D=DEDICATED and ND=NON-DEDICATED

1. **PURPOSE:** To provide soldiers in the unit to which the UMT is assigned the opportunity to worship God.

2. **EXPERIMENT RESULTS:**

a. The number of services conducted by each BDE UMT was the same; however, BDE/B UMT required 1 hour 20 minutes more than BDE/A UMT to perform this task. Time spent was dependent upon distances traveled, length of service, ability to coordinate and ability to reach the unit. These last two factors are important because they show the impact of communication and transportation equipment on the ability to perform the task.

b. Although the number of services at BN level was the same, the transportation log indicates that BN/A UMT traveled 45 km more than BN/B to perform this task. This explains why BN/A spent more time to perform this task than BN/B. Since the only differences between the battalions were the distance traveled and that one (BN/A) had dedicated communication, one may conclude that dedicated communication definitely provided BN/A with the capability to travel farther in less time than BN/B.

### 3. IMPACT OF EQUIPMENT ON ABILITY TO PERFORM TASK:

a. Logs indicate that UMTs with dedicated communication and transportation were able to coordinate services and reach units better than UMTs with dedicated transportation only.

b. All UMTs used transportation and communication of some sort in support of this task. This indicates the essentiality of this equipment in order to perform this task.

#### ANALYSIS OF METL ACCOMPLISHMENTS FIELD EXPERIMENT

TABLE 12

TASK: 1b General Religious Support (worship service)

UMT	UNIT	QTY	TIME	COMMO	TRANS
BDE/A	BN	2	2.3	D	D
BDE/B	BN	1	3.2	ND	D
BN/A					
BN/B					

#### LEGEND:

UMT: Performing task. BDE/A and BN/A represent UMTs with communication and transportation. BDE/B and BN/B represent UMTs with transportation only.

UNIT: For whom task was performed

QTY: # of times task was performed

TIME: To perform task, including travel time in hours

COMMO/TRANS: Indicates if either one was used in support of this task. D=DEDICATED and ND=NON-DEDICATED

1. PURPOSE: To provide soldiers assigned to units other than the one to which the UMT is assigned or attached the opportunity to worship God.

#### 2. EXPERIMENT RESULTS:

a. BDE/A performed 1 service more than BDE/B. On an average, BDE/A spent 1 hour and 9 minutes and BDE/B 3 hours and 20 minutes per task performed.

b. Since general religious support is primarily provided to units and detachments in the BDE rear sector, BN UMTs did not perform this task.

**3. IMPACT OF EQUIPMENT ON THE ABILITY TO PERFORM THIS TASK:**

a. Coordination is a key element for the success of this task. In a training environment, such as NTC, coordination is made through personal contact at meetings days before the services are performed with minimal coordination following. This advantage may not be available in conflicts or wars where situations change unexpectedly in a moment's notice. Therefore, the full impact of the equipment on the ability of the UMT to perform this task cannot be appreciated unless these factors are taken into consideration.

b. All UMTs used transportation and communication of some sort in support of this task. This indicates the essentiality of this equipment in order to perform this task.

c. The log indicate that BDE/B UMT coordinated religious support primarily through personal contact as 4 of the 6 communications made to coordinate GRS were face-to-face. Following these coordinations, the UMT verified unit locations before departing to perform the task.

d. While traveling to perform this task, sometimes for as long as an hour, the UMTs were exposed to many threats and difficulties as they were unable to obtain and verify important information such as unit location, contaminated areas, and flow of the battle. Comments in the log such as "No radio, could not get new grid.", "Could not find chaplain Kirk.", "Because of no radio unable to notify convoy of enemy intrusion.", reflect the threat and difficulties encountered by UMTs without radio while moving on the battlefield to provide religious support.

e. The log indicates that BDE/A UMT had no problems in coordinating and performing this task. The ability to communicate while moving provided BDE/A with the ability to monitor the battle and be aware of threat.

**ANALYSIS OF METL ACCOMPLISHMENTS  
FIELD EXPERIMENT**

**TABLE 13  
TASK: 1d Coordinate Religious Support**

UMT	UNIT	QTY	TIME	COMMO	TRANS
BDE/A	BN	3	.46	D	D
BDE/B	BN	5	6.05	ND	D
BN/A	BDE	4	.04	D	D
BN/B	BN/BDE	5	1.52	ND	D

**LEGEND:**

**UMT:** Performing task. BDE/A and BN/A represent UMTs with communication and transportation. BDE/B and BN/B represent UMTs with transportation only.

**UNIT:** For whom task was performed

**QTY:** # of times task was performed

**TIME:** To perform task, including travel time in hours

**COMMO/TRANS:** Indicates if either one was used in support of this task. D-DEDICATED, ND=NON-DEDICATED AND N=NOT USED

1. **PURPOSE:** To coordinate religious support with other UMTs to insure effective denominational religious support.

2. **EXPERIMENT RESULTS:**

a. BDE/A made 2 coordinations less than BDE/B. On an average, BDE/A spent 15.3 minutes per coordination and BDE/B 81 minutes per coordination.

b. BN/A performed 1 coordination less than BN/B. On an average, BN/A spent 1 minute per coordination and BN/B 34.4 minutes per coordination.

3. **IMPACT OF EQUIPMENT ON ABILITY TO PERFORM TASK:**

a. UMTs with dedicated radio communication and transportation required less steps and time to coordinate religious support than UMTs with dedicated transportation only. b. UMTs without dedicated radio communication didn't have the capability to be reached by other UMTs or units to coordinate religious support. Therefore, coordination was done by leaving a message with the S-1 or face-to-face at staff meetings. The logs indicate that BDE/B performed 4 of 5 coordinations by face-to-face contact. And in 4 of 5

coordinations BN/B left messages which were never received. As indicated by the logs, when messages were not received or answered, it resulted in last minute cancellations, long waiting periods to perform the task, or mission failure.

# ANALYSIS OF METL ACCOMPLISHMENTS FIELD EXPERIMENT

TABLE 14  
TASK: 1e Request Ecclesiastical Supplies

UMT	UNIT	QTY	TIME	COMMO	TRANS
BDE/A	BN	1	7.0	D	D
BDE/B	BN	1	19.0	ND	D
BN/A					
BN/B					

**LEGEND:**

**UMT:** Performing task. BDE/A and BN/A represent UMTs with communication and transportation. BDE/B and BN/B represent UMTs with transportation only.

**UNIT:** For whom task was performed

**QTY:** # of times task was performed

**TIME:** To perform task, including travel time in hours

**COMMO/TRANS:** Indicates if either one was used in support of this task. D=DEDICATED and ND=NON-DEDICATED AND N=NOT USED

1. **PURPOSE:** Provide ecclesiastical supplies upon request to subordinate UMTs.

2. **EXPERIMENT RESULTS:**

a. Logs indicate that both BDE UMTs received the requests and forwarded supplies to the BN UMTs.

b. BDE/A completed this task 12 hours faster than BDE/B. The time recorded was from the time the BN placed the request to the time of delivery.

3. **IMPACT OF EQUIPMENT ON ABILITY TO PERFORM TASK:**

a. Dedicated transportation and radio communication provided BDE/A with the necessary means to accomplish this task much faster than BDE/B.

b. BN/B UMT sent its request through the S-1 channels which required more time to reach the BDE UMT and did not guarantee delivery. Due to the fact that ecclesiastical supplies are not available through the Army standard supply system, but rather through the UMT channels, the BN UMT sent the request through S1 channels to the BDE UMT.

c. Supplies were delivered to or picked up by the BN UMTs. Dedicated transportation was a key factor for both BDEs to achieve this task. However, dedicated communication was also the key factor for BDE/A to achieve this task 12 hours sooner than BDE/B.

d. Both BDE UMTs used communication and transportation in support of this task which highlights the need for this equipment to perform this task effectively.

#### ANALYSIS OF METL ACCOMPLISHMENTS FIELD EXPERIMENT

TABLE 15  
TASK: 1f Request UMT Personnel Replacements

UMT	UNIT	QTY	TIME	COMMO	TRANS
BDE/A	BN	1	6	D	D
BDE/B	BN		-	ND	N
BN/A					
BN/B					

**LEGEND:**

UMT: Performing task. BDE/A and BN/A represent UMTs with communication and transportation. BDE/B and BN/B represent UMTs with transportation only.

UNIT: For whom task was performed

QTY: # of times task was performed

TIME: To perform task, including travel time in hours

COMMO/TRANS: Indicates if either one was used in support of this task. D=DEDICATED and ND=NON-DEDICATED AND N=NOT USED

1. PURPOSE: To request UMT replacements through proper channels
2. EXPERIMENT RESULTS:

a. BDE/A UMT received the killed in action notification within 6 hours. The BN S-1 sent the notification through the Admin Log net. Time factor was counted from time of incident to time to notification at BDE level.

b. BDE/B UMT never received the message sent by the BN chaplain assistant through S-1 channels which represents mission failure. Without notification the BDE UMT can not request chaplain replacement and/or make arrangements to provide religious support to the losing unit.

### 3. IMPACT OF EQUIPMENT ON THE ABILITY TO PERFORM THIS TASK:

a. BDE/A UMT with dedicated radio communication was more effective than BDE/B in the performance of this task.

b. BDE/B UMT failed to accomplish this task since the message never reached it. This highlights the problem units and UMTs encounter when sending information to UMTs without dedicated communication equipment.

### UNDER TASK 2, TWO SUBTASKS WERE NOT PERFORMED

- 1) Conduct memorial/funeral services
- 2) Perform services for mass hasty burials

### ANALYSIS OF METL ACCOMPLISHMENTS FIELD EXPERIMENT

TABLE 16  
TASK: 2b Perform/Provide prayers, rites and sacraments  
to casualties

UMT	UNIT	QTY	TIME	COMMO	TRANS
BDE/A	BDE	8	9.20	D	D
BDE/B	BDE	5	12.3	ND	D
BN/A	BN	7	20.0	D	D
BN/B	BN	3	5.0	N	D



**LEGEND:**

**UMT:** Performing task. BDE/A and BN/A represent UMTs with communication and transportation. BDE/B and BN/B represent UMTs with transportation only.

**UNIT:** For whom task was performed

**QTY:** # of times task was performed

**TIME:** To perform task, including travel time in hours

**COMMO/TRANS:** Indicates if either one was used in support of this task. D=DEDICATED, ND=NON-DEDICATED AND N=NOT USED

1. **PURPOSE:** Provide or perform direct religious support to casualties on the battlefield.

2. **EXPERIMENT RESULTS:**

a. BDE/A performed this task 3 times more often than BDE/B. On an average BDE/A spent 1 hour and 10 minutes and BDE/B spent 2 hours and 30 minutes to complete this task.

b. BN/A performed this task 4 times more than BN/B. On an average BN/A spent 2 hours and 51 minutes per task and BN/B spent 1 hour and 40 minutes per task.

3. **IMPACT OF EQUIPMENT ON ABILITY TO PERFORM TASK:**

a. UMTs with dedicated radio communication provided better coverage because they were aware of battle conditions and casualty flow.

b. Unless UMTs without dedicated communication were at the Aid Station before casualties came in, it was unlikely that they would become aware of the casualty situation. In one situation BN/B's log states, "traveled to Main Aid Station's new location. There were many casualties." This implies that the UMT arrived at Aid Station without prior knowledge that casualties were being taken there. In another instance the log reads, "we got lost, had to wait until day break to start again. Unit was attacked. Unit suffered heavy casualties, but we were not able to offer any support." This indicates another situation when the UMT was unaware of the casualty situation.

c. It should be noted this is one of the most critical emergency tasks of the religious support mission.

d. All UMTs used transportation in support of this task. This indicates the essentiality of transportation to support this task effectively.

e. The logs indicate that BDE/A was more aware of battle conditions and casualty flow than BDE/B. This awareness of

battlefield conditions and the capability to receive contact over the radio provided BDE/A with the opportunity to respond promptly and continuously when casualties occurred.

# **ANALYSIS OF METL ACCOMPLISHMENTS FIELD EXPERIMENT**

**TABLE 17**  
**TASK: 2d Respond To Mass Casualty Situation**

UMT	UNIT	QTY	TIME	COMMO	TRANS
BDE/A	BDE	7	3.38	D	D
BDE/B					
BN/A	BN	2	2.30	D	D
BN/B					

**LEGEND:**

**UMT:** Performing task. BDE/A and BN/A represent UMTs with communication and transportation. BDE/B and BN/B represent UMTs with transportation only.

**UNIT:** For whom task was performed

**QTY:** # of times task was performed

**TIME:** To perform task, including travel time in hours

**COMMO/TRANS:** Indicates if either one was used in support of this task. D=DEDICATED, ND=NON-DEDICATED AND N = NOT USED

1. **PURPOSE:** To provide religious support during a mass casualty situation.

2. **EXPERIMENT RESULTS:**

a. Only UMTs with dedicated radio communication responded within minutes of contact and were available to perform this task. Time to respond was dependent upon the location of the UMT when notified. However, the ability to respond rapidly is a key factor for the success of this task and only the UMTs with radios responded promptly.

b. UMTs without dedicated communication did not record any transportation or communication in support of this task. This seems to indicate that they were never notified when mass casualties occurred.

c. In BDE/B the Forward Support Battalion (FSB) UMT covered all mass casualties since BDE/B and/or BN/B UMTs were not available to provide support. However, this coverage failed when the FSB UMT became a casualty also.

3. IMPACT OF EQUIPMENT ON ABILITY TO PERFORM TASK:

a. Both UMTs that were able to respond to mass casualties used dedicated communication and transportation.

b. Having radio communication and dedicated transportation provided the UMT the synchronization and agility necessary to respond effectively to this task.

ANALYSIS OF METL ACCOMPLISHMENTS  
FIELD EXPERIMENT

TABLE 18  
TASK: 3a Provide Pastoral Counseling For Soldiers

UMT	UNIT	QTY	TIME	COMMO	TRANS
BDE/A	BDE	23	5.5	D	D
BDE/B	BDE	3	12.0	N	D
BN/A	BN	4	5.0	D	D
BN/B	BN	2	1.15	N	D

LEGEND:

UMT: Performing task. BDE/A and BN/A represent UMTs with communication and transportation. BDE/B and BN/B represent UMTs with transportation only.

UNIT: For whom task was performed

QTY: # of times task was performed

TIME: To perform task, including travel time in hours

COMMO/TRANS: Indicates if either one was used in support of this task. D=DEDICATED, ND=NON-DEDICATED AND N=NOT USED

1. PURPOSE: To provide counseling to soldiers on the battlefield.

2. EXPERIMENT RESULTS:

a. BDE/A performed this task 20 times more often than BDE/B. BDE/A, on an average, spent 15.2 minutes per task and BDE/B, 240 minutes per task. Although time varies according to the time spent on each counselee, travel time is a major portion of this task as well. Therefore, the ability of the UMT to coordinate, move to, and find the unit location is reflected in the time spent for this task.

b. BN/A performed this task 2 times more often than BN/B. BN/A, on an average, spent 75 minutes per task and BN/B spent 37.5 minutes per task.

### 3. IMPACT OF EQUIPMENT ON THE ABILITY TO PERFORM THIS TASK:

a. Communication is a key element in coordinating counseling, and more so in emergency counseling situations. Commonly UMTs without dedicated communication were advised of the need for counseling upon their arrival at the unit location. However, when emergency counseling arrived, it was very difficult to locate the UMT without communication which prevented the soldier from receiving help resulting in mission failure.

b. The logs indicate that dedicated transportation allowed the UMTs to reach units frequently.

#### ANALYSIS OF METL ACCOMPLISHMENTS FIELD EXPERIMENT

TABLE 19  
TASK: 3b Visit Units And UMTs

UMT	UNIT	QTY	TIME	COMMO	TRANS
BDE/A	BDE	20	35.0	D	D
BDE/B	BDE	8	10.0	ND	D
BN/A	BDE	4	9.0	D	D
BN/B	BN/BDE	18	27.0	ND	D

#### LEGEND:

UMT: Performing task. BDE/A and BN/A represent UMTs with communication and transportation. BDE/B and BN/B represent UMTs with transportation only.

UNIT: For whom task was performed

QTY: # of times task was performed

TIME: To perform task, including travel time in hours

COMMO/TRANS: Indicates if either one was used in support of this task. D=DEDICATED, ND=NON-DEDICATED AND N=NOT USED

1. PURPOSE: Visit units and UMTs to assess the morale and religious support needs.

#### 2. EXPERIMENT RESULTS:

a. BDE/A UMT made 12 more visits than BDE/B. The log indicates that BDE/A UMT was more aware of the flow of the battle and unit locations than BDE/B. This awareness allowed the UMT to reach units more effectively and in less time resulting in mission success.

b. BN/A made 14 visits less than BN/B. Since BN/B had no organic means of communication, it depended upon personal contact to monitor the units. This seems to indicate that at BN level the UMT is able to move between elements easier than at brigade level. The transportation log indicates that BN/B traveled 150 km more than BN/A to visit units. At BN level the UMT has shorter distances to travel between elements and moves primarily horizontally rather than vertically as the BDE UMT does.

### 3. IMPACT OF EQUIPMENT ON ABILITY TO PERFORM TASK:

a. All UMTs used transportation and communication which indicates how critical mobility and coordination are to perform this task successfully.

b. BDE/A UMT with dedicated radio communication performed this task better than BDE/B UMT without it. However, BN/B UMT without the equipment performed this task better than BN/A UMT with dedicated communication. The impact of dedicated communication was primarily noticeable at BDE level.

### ANALYSIS OF METL ACCOMPLISHMENTS FIELD EXPERIMENT

TABLE 20  
TASK: 4a Advise The Commander

UMT	UNIT	QTY	TIME	COMMO	TRANS
BDE/A	BDE	7	11.0	D	D
BDE/B	BDE	2	2.0	ND	D
BN/A	BN	1	1.0	D	D
BN/B					

#### LEGEND:

UMT: Performing task. BDE/A and BN/A represent UMTs with communication and transportation. BDE/B and BN/B represent UMTs with transportation only.

UNIT: For whom task was performed

QTY: # of times task was performed

TIME: To perform task, including travel time in hours

COMMO/TRANS: Indicates if either one was used in support of this task. D=DEDICATED, ND=NON-DEDICATED AND N=NOT USED

1. PURPOSE: To advise commanders on morale, morals, and spiritual welfare of the unit.

2. EXPERIMENT RESULTS:

a. BDE/A performed this task five times more often than BDE/B. On an average, BDE/A spent 1 hour and 34 minutes and BDE/B spent 1 hour per task performed. This indicates that UMTs with dedicated communication stay in touch with commanders and their staff more than UMTs without it. This allows the UMT with dedicated communication to be in a better position to advise commanders.

b. BN/A performed this task one time only. BN/B, however, did not perform this task at all. This seems to indicate that at BN level this UMT had minimal interchange with the commander. BN/A log indicates the UMT was more in contact with the BN than BN/B. This contact allows the UMT to be aware of the BN condition which in turn enables it to better advise the commander.

## 2. IMPACT OF EQUIPMENT ON THE ABILITY TO PERFORM THIS TASK:

a. UMTs with dedicated communication were able to advise the commander more often than UMTs without it.

b. At BDE level both UMTs used transportation and communication in support of this task. This indicates both the need for communication equipment and transportation to perform this task effectively.

c. At BN level only BN/A performed this task.

### ANALYSIS OF METL ACCOMPLISHMENTS FIELD EXPERIMENT

TABLE 21  
TASK: 4b Attend Staff or UMT Meeting

UMT	UNIT	QTY	TIME	COMMO	TRANS
BDE/A	BDE	12	11.0	D	D
BDE/B	BDE	4	6.0	ND	D
BN/A	BN	3	6.0	D	D
BN/B	BN	2	4.0	ND	D

#### LEGEND:

UMT: Performing task. BDE/A and BN/A represent UMTs with communication and transportation. BDE/B and BN/B represent UMTs with transportation only.

UNIT: For whom task was performed

QTY: # of times task was performed

TIME: To perform task, including travel time in hours

COMMO/TRANS: Indicates if either one was used in support of this task. D=DEDICATED, ND=NON-DEDICATED AND N=NOT USED.

1. **PURPOSE:** Attend staff and UMT meetings as scheduled.

2. **EXPERIMENT RESULTS:**

a. BDE/A performed this task 8 times more often than BDE/B. On an average, BDE/A spent 55 minutes and BDE/B spent 90 minutes to perform this task.

b. BN/A performed task 1 time more than BN/B. On an average, both UMTs spent 2 hours per task performed. Time spent depended on distance traveled and length of meetings.

3. **IMPACT OF EQUIPMENT ON ABILITY TO PERFORM TASK:**

a. UMTs with dedicated communication attended more meetings than UMTs without it. Having dedicated communication allowed them to be aware of when and where meetings were going to be held and of last minute changes.

b. UMTs without dedicated communication found themselves at the wrong location when meeting location or time had been changed. This problem was evident by the comments in the logs. One of the UMTs recorded the following comments after arrival to attend a staff meeting: "The location of the staff meeting was changed. We are going to the BSA." On another occasion the UMT wrote: "BDE chaplain's meeting was changed." BN/B UMT never reached the new location.

c. All UMTs used communication and transportation in support of this task. This indicates the essentiality of this equipment to perform this task.

**TAB B**

**E-18**



## BDE COMMUNICATION LOG SUMMARY

1. BDE UMT COMMUNICATIONS. The following table is a summary of the communications made by each BDE UMT and the purpose.

TABLE 22  
BDE UMT COMMUNICATION LOG SUMMARY

PURPOSE	# OF COMMO	
	BDE/A	BDE/B
COORDINATE REL SUPPORT	20	16
REQUEST UNIT LOCATION	18	5
EMERGENCIES	5	1
NBC/ENEMY INFORMATION	4	0
COORDINATE MOVEMENTS	5	2
CONTACT OTHER UMTS	7	6
TOTAL	59	30

## 2. EXPLANATION OF TERMS AND OBSERVATIONS:

a. Coordinate Religious Support: These were communications made to plan religious services, counseling sessions, and UMT after action reviews. BDE/A made 4 communications more than BDE/B. The logs indicate that BDE/A communicated more with subordinate UMTs to coordinate services and after action reviews than BDE/B. This accounts for the difference in this area.

b. Request Unit Location: These were communications made to obtain location of units. BDE/A made 13 communications more than BDE/B to request unit locations. UMT without dedicated communication noted one particular instance in which they drove 37.7km and spent 5 hours and 10 minutes trying to find the Aid Station, but noted "no radio, couldn't get new grid."

c. Emergencies: These were communications made to deliver Red Cross messages, provide religious support to casualties, mass casualties and other emergency situations. BDE/A made 4 more communications to respond to emergencies than BDE/B. The logs revealed that when emergencies happened, BDE/A received notification within minutes. However, BDE/B did not receive notification unless they were at the Admin/log, CP, or the Aid Station when the emergencies occurred.

d. NBC/Enemy Information: These were communications to notify or be notified of enemy advance and contaminated areas. BDE/A made 4 communications more in this area than BDE/B. One note from BDE/B read, "because of no radio unable to notify convoy of enemy intrusion." One should note that regardless the communication equipment a UMT may have, it may still be killed in a NBC attack. However, UMTs with dedicated communication would become aware of contaminated areas.

e. Coordinate Movement: These were communications in which the organic unit of assignment provided critical information to the UMT about unit convoy movement and/or new locations. BDE/A made 3 more communications than BDE/B to coordinate movements. A comment in BDE/B log which reads "no radio, couldn't get new grid", indicates how UMTs without communication had greater difficulty in following unit movement than UMTs with communication.

f. Contact Other UMTs: These were communications made by the Bde UMT to subordinate UMTs for coordination and general religious support issues. BDE/A made 1 communication more than BDE/B in this area. On numerous occasions the UMTs without dedicated communication recorded in their log comments such as, "left message for BDE chaplain", and "request communication with BDE chaplain, never answered." These comments indicate how difficult it is to contact UMTs without dedicated communication.

3. IN SUMMARY: BDE/A made 29 communications more than BDE/B. Of the 6 areas listed above, 4 are heavily weighted on BDE/A side. Two of these areas, emergency and NBC/Enemy information, are of utmost importance to the religious support mission. Without the ability to monitor the battle the UMT is handicapped in its ability to respond to emergency situations. Furthermore, without the ability to respond to emergency situations before casualties die or are moved, the religious support mission could result in failure. Additionally, if the UMT is not aware of contaminated areas, NBC attacks, and enemy movement it will be more vulnerable to these threats. Based on this analysis one may conclude that UMTs with communication will be more aware of emergency situations, casualty flow, flow of the battle, contaminated areas, and unit movement and locations, than UMTs without it.

## BDE TRANSPORTATION LOG SUMMARY

1. BDE UMT TRANSPORTATION. The following table is a summary of all the kilometers each BDE UMT drove and the purpose.

TABLE 23  
BDE UMT TRANSPORTATION LOG SUMMARY

PURPOSE	KM BDE/A	KM BDE/B
ACCOMPANY UNIT	656	170
CONDUCT SERVICES	9	19
EMERGENCIES	171	62
ATTEND STAFF MEETING	37	22
VISIT AID STATIONS	164	69
UNIT COVERAGE	175	4
GEN REL SPT	764	76
OTHER	85	140
TOTAL	2061	562

## 2. EXPLANATION OF TERMS AND OBSERVATIONS:

a. Accompany Unit: Trips the UMTs made to accompany the unit with which they were located at the time of movement. BDE/A traveled 486 Km more than BDE/B to accompany the unit. The logs indicate that BDE/A was more aware of unit movements than BDE/B which may account for the large difference in km traveled.

b. Conduct Services: Trips made to perform or provide worship services. BDE/A traveled 10 km less than BDE/B to conduct worship services. The amount of km traveled under this category was dependent upon the location of the UMT before traveling to the unit where services were to be held.

c. Emergencies: Trips made to respond to emergency situations. BDE/A traveled 109 km more than BDE/B to respond to emergencies. The reason for the large difference is related to the number of emergency situations each BDE UMT responded to. Logs indicate that UMT with dedicated communication was involved in 10 more emergency situations at BDE level and 6 more at BN level than UMTs without dedicated communication (see TAB A, Summary of METL, TASK 2). The ability to monitor the battle and be reached through dedicated communication accounts for the significant differences in this category. The margin of performance of BDE/A over BDE/B is a clear indication of the impact of dedicated communication upon the ability of the UMT to perform its mission.

d. Attend Staff Meeting: Trips made to attend staff meetings. BDE/A traveled 15 km more than BDE/B to attend staff

meetings. The difference is related to the number of staff meetings attended by each UMT. Logs indicate that UMT with dedicated communication at BDE level attended 12 staff meetings and the UMT without dedicated communication attended only 4. (see TAB B, Sub-task 4b). The staff meetings are a critical place for coordinating religious support, battle update, and briefing the commanders. Additionally the logs indicate that BDE/A achieved better staff integration which is essential to providing effective religious support.

e. Visit Aid Station: Trips made to visit Aid Stations during regular visits and mass casualty situations. BDE/A traveled 95 km more to visit Aid Stations than BDE/B. The logs reveal that UMT with dedicated communication and transportation were able to respond to mass casualties and conduct regular visits much better than UMT without it (see TAB B, Sub-task 2-d). The ability of the UMT to visit and respond to the Aid Station is a critical part of the religious support mission. This is the location for the UMT to provide religious support to the injured and dying. Commanders place high priority on this mission in war and the inability of the UMT to respond could represent failure of the religious support mission.

f. Unit Coverage: Trips made to provide pastoral care to specific units. BDE/A traveled 171 km more than BDE/B to cover units. The reason for this difference is related to the number of visits each UMT made to their units. According to the METL log task 3b, BDE/A made 12 more visits than BDE/B.

g. General Religious Support: Trips made to provide religious support to soldiers assigned or attached to units other than the one to which the UMT is assigned or attached. BDE/A traveled 688 km more than BDE/B to provide religious support. The logs indicate that UMT with dedicated communication and transportation provided more extensive GRS than UMT without this equipment. GRS is a key portion of the BDE religious support mission which results in providing religious support to many detachments or units which are co-located in the Brigade rear area. Without this effort, little or no religious support would be available to these soldiers.

h. Other: Trips made for other purposes (repair vehicle, fuel points, pick up equipment, etc.) than the ones mention above.

3. IN SUMMARY: BDE/A UMT traveled 1499 km more than BDE/B UMT. Of the 7 purposes analyzed, 6 are heavily weighted on BDE/A side. Both UMTs had dedicated transportation throughout the exercise, and were assigned to similar type units. The only significant difference was that one (BDE/A) had dedicated communication. Therefore, one may conclude that dedicated communication and transportation allowed BDE/A to move more effectively throughout the battlefield and therefore, accomplish more of its mission than BDE/B.

## BN COMMUNICATION LOG SUMMARY

1. BN UMT COMMUNICATIONS. The following table is a summary of the communications made by each BN UMT and the purpose.

TABLE 24  
BATTALION UMT COMMUNICATION LOG SUMMARY

PURPOSE	# OF COMMO	
	BN/A	BN/B
COORDINATE REL SUPPORT	3	5
REQUEST UNIT LOCATION	5	8
EMERGENCIES	6	1
NBC/ENEMY INFORMATION	7	1
COORDINATE MOVEMENTS	3	2
CONTACT OTHER UMTS	3	3
TOTAL	27	22

### 2. EXPLANATION OF TERMS AND OBSERVATIONS:

a. Coordination of Religious Support: These were communications made to plan religious services, counseling sessions, and UMT after action reviews. BN/A made 2 communications less than BN/B to coordinate religious support. The following facts explain part of the reasons for the difference in this area. Most of the communications from BN/B were with the BDE UMT. Since neither had organic communication equipment, BN/B was faced with leaving the messages for the BDE UMT with the BDE S-1. As a result, some of the communications from BN/B never reached the BDE UMT. The logs indicate that 66% of the communications from BN/A reached the receiver; however, only 50% of BN/B reached the receiver.

b. Request Unit Location: These were communications made to obtain location of units where the UMT would conduct services. BN/A made 3 communications less than BN/B. UMT without dedicated communication noted one particular instance where they were lost for 1 1/2 hours and had to wait until day break to continue searching. In another instance they were lost for 5 hours searching for the Aid Station because they had insufficient information. On the surface it appears that BN/A was less active; however, one may conclude that awareness of unit movement through radio monitoring resulted in fewer requests for unit locations for BN/A.

c. Emergencies: These were communications made to deliver Red Cross messages, provide religious support to casualties, mass casualties and other emergency situations. BN/A made 5 communications more in this area than BN/B. Logs indicate that

BN/A received almost immediate notification when emergencies happened. On the contrary, BN/B was not readily accessible to receive emergency messages. In one instance BN/B went to visit the Aid Station and found that casualties were being taken there. This situation indicates that without the ability to monitor the battle, the UMT's ability to respond to emergency situations is drastically reduced or eliminated.

d. NBC/Enemy Information: These were communications to notify or be notified of enemy advance and contaminated areas. BN/A made 6 communications more than BN/B. The log indicate that BN/A was warned in advance about NBC attacks and/or to receive warning about contaminated areas. However, BN/B log indicates their inability to be warned about NBC attacks and contaminated areas. One note from BN/B read "Unable to monitor battle we drove by some guys in MOPP4 so we went to MOPP4 and drove to forward Aid Station and they claimed we just contaminated them. We were never warned of possible chemical zones."

e. Coordinate Movement: These were communications in which the unit provided critical information to the UMT about unit movement and/or new locations. BN/A made 1 communication more than BN/B. BN/B log indicates that both communications were made through face-to-face contact. However, BN/A communications were made through its dedicated radio.

f. Contact Other UMTs: These were communications made by the Bde UMT to subordinate UMTs for coordination and general religious support issues. Both BN UMTs were able to make the same number of communications. However, the log indicates that BN/B encountered great difficulty in communicating directly with other UMTs without communication equipment. On more than one occasion, comments such as "left message for BDE chaplain, never answered," are recorded in the logs. Of the 3 communications BN/B made, only 1 was successful. However, of the 3 communications BN/A made, 2 were successful. This represents a 33% success rate for BN/B against a 66% success rate for BN/A.

3. IN SUMMARY: BN/A made 5 communications more than BN/B. Of the 22 communications BN/B made, 10 were by face-to-face contact. One should consider the extra time required to communicate face-to-face rather than through radio. Of the 6 areas considered above, emergencies and NBC/Enemy information weighted heavily on BN/A side. These areas are of utmost importance for the religious support mission. If the UMT is unable to respond in a timely manner to emergencies, the religious support mission may be a failure as casualties may die or be evacuated before the UMT arrives. Similarly, if the UMT is captured or goes into a contaminated area resulting in death, the soldiers are without religious support until a replacement is assigned. Depending on the stage of the war, replacements

may not arrive for weeks or months. Therefore, one may conclude that the UMT with dedicated communication at BN level, would be better aware of battlefield conditions to respond to the religious support mission requirements.

## BN TRANSPORTATION LOG SUMMARY

1. BN UMT TRANSPORTATION. The following table is a summary of the kilometers each BN UMT drove and the purpose.

TABLE 25  
BATTALION UMT TRANSPORTATION LOG SUMMARY

PURPOSE	KM BN/A	KM BN/B
ACCOMPANY UNIT	264	301
CONDUCT SERVICES	54	9
EMERGENCIES	95	42
ATTEND STAFF MEETING	40	71
VISIT AID STATIONS	46	10
UNIT COVERAGE	45	200
GEN REL SPT	0	0
OTHER	78	45
TOTAL	622	678

### 2. EXPLANATION OF TERMS AND OBSERVATIONS:

a. Accompany Unit: Trips the UMTs made to accompany the unit with which they were located at the time of movement. BN/A traveled 37 km less than BN/B. Difference in km traveled is minimal and is a result of the total km traveled by each unit rather than an indication of the impact of equipment on the ability of the UMT to travel on the battlefield.

b. Conduct Services: Trips made to perform or provide worship services. BN/A traveled 45 km more than BN/B to provide religious services. Distance traveled depended on the location of the unit and of the UMT before leaving to perform the service. In this situation BN/A traveled to 4 different locations to perform 5 services and BN/B to 3 locations to perform 5 services. This accounts for the difference in km traveled.

c. Emergencies: Trips made to respond to emergency situations. BN/A traveled 53 km more than BN/B. Logs indicate that BN/A was more aware of emergency situations and therefore better able to respond to these than BN/B.

d. Attend Staff Meeting: Trips made to attend staff meetings. BN/A traveled 31.5 km less than BN/B. Logs indicate that BN/B traveled 43.5 km trying to find the location of a meeting which was changed at the last minute, but since BN/B had no means of communication they could not be advised of the change.



e. Visit Aid Station: Trips made to visit Aid Stations during regular visits and mass casualty situations. BN/A traveled 36 km more than BN/B to visit the Aid Station. Logs indicate that BN/A was more aware of the locations and movement of the Aid Stations which may account for the difference in this area.

f. Unit Coverage: Trips made to provide pastoral care to specific units. BN/A traveled 155 km less than BN/B. This difference seems to indicate that BN/B was able to move around the battlefield effectively although it did not have a dedicated radio. However, the logs also indicate that BN/B had more difficulty locating units and was less aware of last minute changes than BN/A which largely accounts for the difference in this area.

g. General Religious Support: Trips made to provide religious support to soldiers assigned or attached to units other than the one to which the UMT is assigned or attached. No km were recorded under this category. More units/detachments of this nature are located in the Bde Rear sector in which the Bde UMT provides the most religious support.

h. Other: Trips made for purposes other (repair vehicle, fuel points, pick up equipment, etc.) than the ones mentioned above.

3. IN SUMMARY: BN/A traveled 56 km less than BN/B. The logs indicate that BN/B had more difficulty in locating units and was not aware of last minute changes which resulted in more traveling. Based on the logs one may conclude that BN/A was able to travel and avoid threat factors more effectively than BN/B. Considering that both UMTs were of the same configuration except that BN/A had dedicated communication; one may conclude that dedicated communication improves the UMT ability to move on the battlefield.

**APPENDIX F**  
**COMMUNICATION SUPPORT REQUIREMENTS**

1. **PURPOSE.** This appendix identifies the communication support requirements of the UMT on the battlefield at different levels of echelon from division down to battalion.

2. The communication support requirements will vary depending on the level of echelon to which the UMT is assigned. These requirements to communicate information between two or more battlefield communicators are identified as needlines. Needlines are examined under the Communication Data Base (CDB) program to determine the communication equipment required to fulfill these requirements.

3. The following figures identify the communicators with whom the UMT communicates on the battlefield. Additionally, following each figure are the justifications as to why the UMT needs to communicate with the various communicators. The arrows at the end of each line in the figures indicate if the communication is one or two-ways.

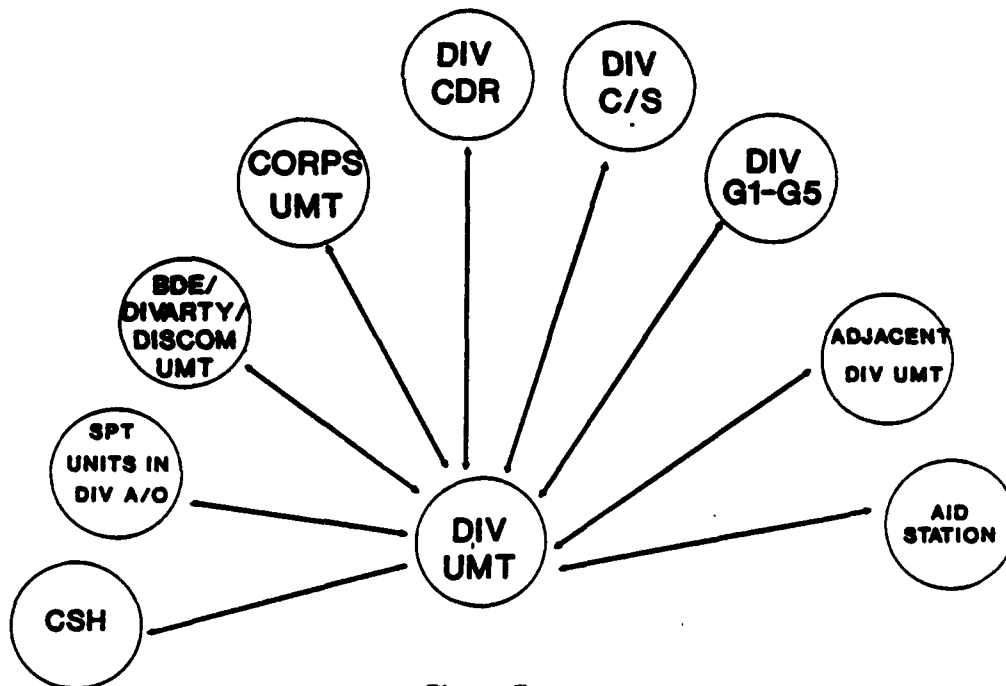


Figure 7  
DIVISION UMT

## **COMMUNICATOR/RECEIVER**

**Division Commander:** As a special/personal staff officer for the commander, the chaplain needs direct voice linkage as the UMT mission moves about the battlefield.

**Division C/S:** UMT informs the XO of religious support data/needs within the command.

**Division Staff (G1,2,3,4,5):** Vital information on location/status of units must be available to the UMT so they can respond to local unit needs and emergency situations and be able to navigate to them in a timely manner.

**Corps UMT:** To coordinate and update corps UMT on Division needs; i.e. denominational/general religious support coverage needs; update on chaplain/chaplain assistant strength, activities, and status of equipment.

**BDE/DIVARTY/DISCOM UMT:** To coordinate/assist adjacent BDE/DISCOM/DIVARTY UMTs in providing temporary general/denominational religious support. To update information on DIVARTY/DISCOM units being attached to BDE units.

**BN UMT:** To coordinate general religious support within the BDE. To maintain a technical chain of communication with UMT to receive and update urgent and necessary data.

**Adjacent Division UMT:** To coordinate any minimum essential religious coverage.

**Division Aid Station:** To receive information concerning the casualties and the need for religious rites, sacraments, and ordinances.

**Combat Support Hospital:** To receive and request information on soldiers in the hospital as well as casualties.

**Division Support Units:** To communicate with units in order to provide minimum essential religious support especially to those units without organic UMT.

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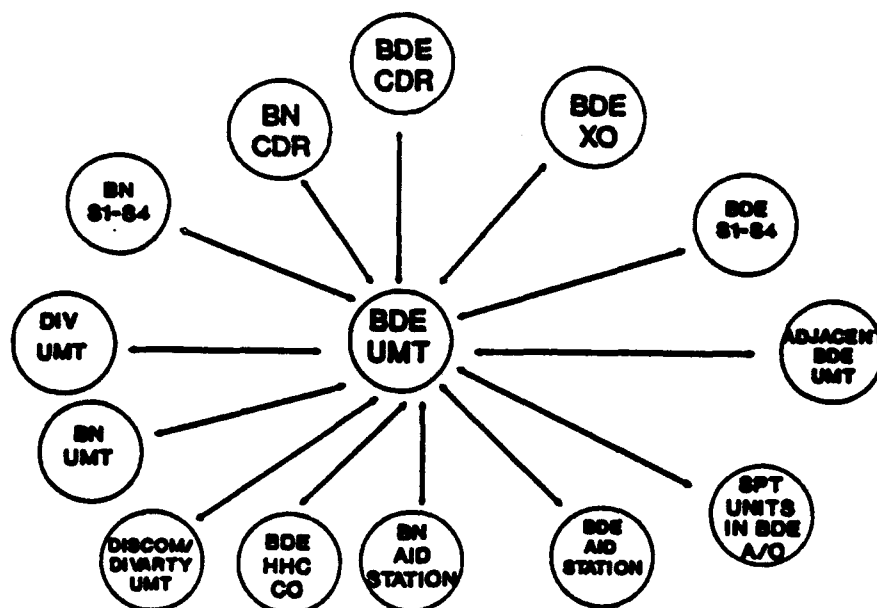


Figure 8  
BRIGADE UMT (DIVISION)

#### COMMUNICATOR/RECEIVER

**Brigade Commander:** As a special/personal staff officer for the commander, the chaplain needs direct voice linkage as the UMT mission moves about the battlefield.

**Brigade XO:** Keeps the XO informed of religious needs/data within the command. Also, when the commander is not available, the UMT keeps voice communication with the XO.

**Brigade Staff (S1,2,3,4):** Through communication keeps the staff aware of the location of the UMT and receives vital information on location/status of units so that the UMT can respond to emergency and other needs and be able to navigate to them in a timely manner.

**Brigade HHC:** Maintain direct communication with Company Commander and First Sergeant to ensure religious support is provided to the unit soldiers.

**Battalion UMT:** To coordinate and update religious support needs; i.e. denominational coverage within the BDE. To maintain a technical chain of communication with the UMTs to receive urgent and emergency information request for ministry. To provide religious support/battle fatigue counseling to the battalion UMT.

**Battalion Commander:** Coordinate with Bn Cdr without organic UMT to ensure religious support is provided to their unit. Coordinate UMT replacements.

**Battalion Staff (S1,2,3,4):** Coordinate with Bn Staff which has no assigned UMT in order to receive vital information on location and status of unit and their minimum religious support needs.

**Adjacent BDE UMT:** To coordinate essential religious support needs.

**DIVARTY/DISCOM UMT:** To coordinate and ensure religious support needs are provided for.

**Division UMT:** To coordinate and update division chaplain on BDE needs; i.e. denominational religious support; update on UMT personnel strength; status of UMT equipment.

**Battalion Aid Station:** To receive information concerning casualties, to coordinate religious support of soldiers, and respond to emergency situations such as mass casualties.

**Brigade Aid Station:** Make communication contact with clearing station on status of soldiers from BDE prior to visitation.

**Brigade Support Units:** Communicate with unit commanders to ensure minimum religious support needs are provided for especially in units without organic UMT.

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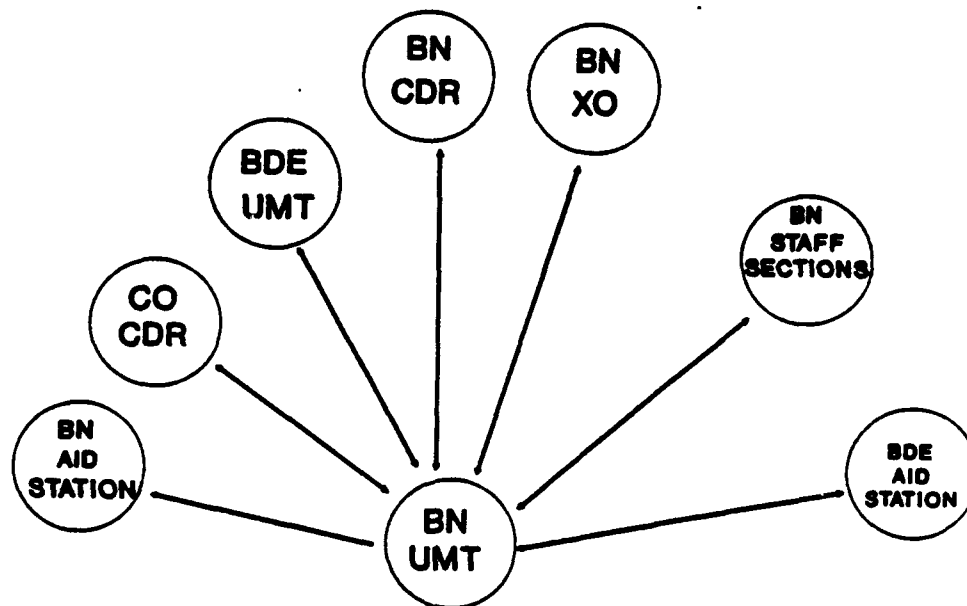


Figure 9  
BATTALION UMT (DIVISION)

## COMMUNICATOR/RECEIVER

**Battalion Commander:** As a special/personal staff officer of the commander, the chaplain will need to have direct voice linkage as the UMT mission moves about the battlefield.

**Battalion XO:** Informs the XO of the minimum religious support needs within the battalion.

**Battalion Staff (S1,2,3,4):** Makes contact to receive vital information on location and status of units so that the UMT can respond to local unit needs and emergency situations and be able to navigate to them in a timely manner.

**Company Commanders:** Has a direct voice communication with each company Cdr so that the UMT can receive messages as to the needs of the unit at a certain location and to coordinate for minimum essential religious support.

**Brigade UMT:** To coordinate for denominational and general religious support within the BN and the BDE. To update the BDE UMT on the Bn UMT religious activities and status of equipment and ecclesiastical items. To receive information about UMT meetings and chaplain replacement arrival.

**Battalion Aid Station:** To receive information concerning casualties and respond to mass casualty situations.

**Brigade Aid Station:** Communicates with aid station on status of soldiers from Bn prior to visitation.

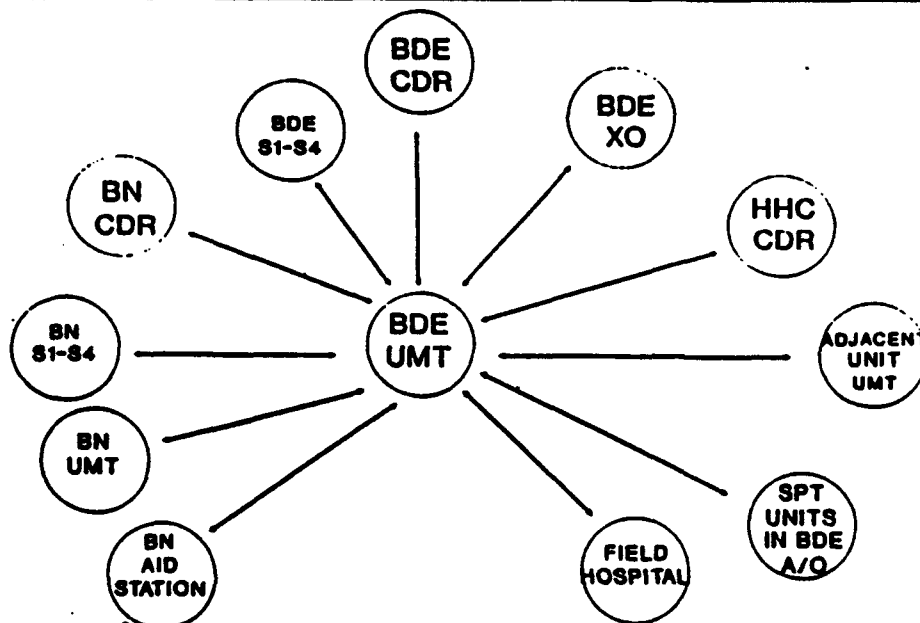


Figure 10  
BRIGADE UMT (SEPARATE BDE)  
F-5

## **COMMUNICATOR/RECEIVER**

**Brigade Commander:** As a special/personal staff officer for the commander, the chaplain will need direct voice linkage as the UMT mission moves about the battlefield.

**Brigade XO:** Keeps the XO informed of religious needs/data within the command. UMT keeps voice communication with XO when the Cdr is absent.

**Commander HHC:** UMT communicates with commander to provide necessary coverage to HHC personnel, and advises him on status of the unit.

**Brigade Staff (S1,2,3,4):** Communicates with staff section to receive vital information on location, status of units, and emergency situations as to respond to local needs and navigate to the units in a timely manner. UMT monitors the Log Net to stay abreast of the battle flow, road conditions and casualty situation.

**Battalion Commander:** To coordinate with the Battalion Commander within the Bde to ensure effective religious support especially when the battalion has no organic UMT.

**Battalion Chaplain:** To coordinate general and denominational support within the brigade. To maintain a technical chain of communication with the UMTs within the Bde. To receive urgent and emergency requests for ministry.

**Aid Station:** To receive information concerning casualties and coordinate religious support for soldiers.

**Adjacent Unit Chaplain:** To coordinate necessary/essential religious and denominational support.

**Brigade Support Units:** Communicate with units in area of operation to provide minimum essential religious coverage especially if they are without organic UMT.

**Brigade Field Hospital:** To have communication with the Field Hospital so as to receive information on status of casualties from the brigade prior to visitation.

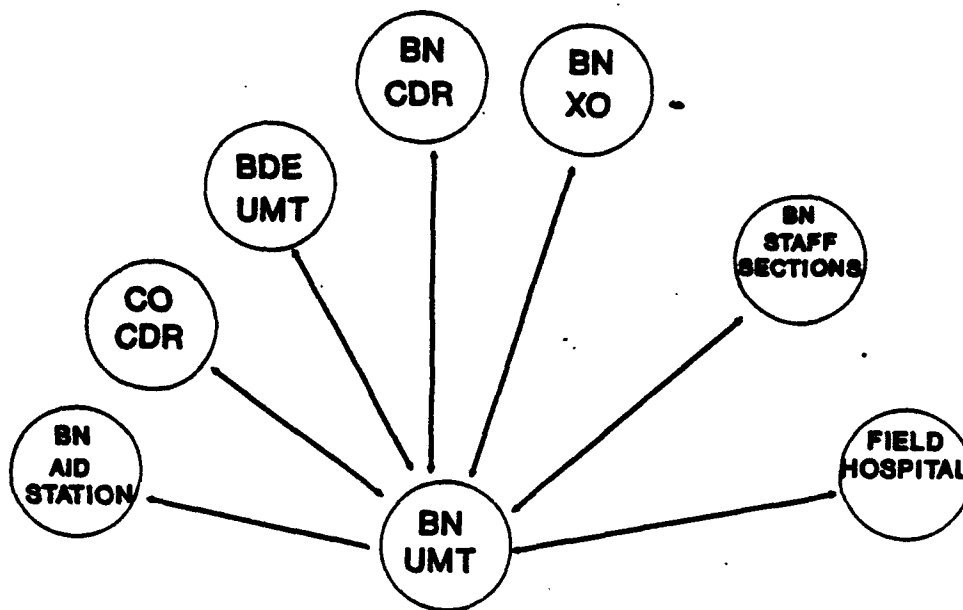


Figure 11  
BATTALION UMT (SEPARATE BRIGADE)

#### COMMUNICATOR/RECEIVER

**Battalion Commander:** As a special/personal staff officer for the commander, the chaplain will need to have direct voice linkage as the UMT mission moves about the battlefield.

**Battalion XO:** Informs the XO of the minimum religious support needs within the battalion. Also, UMT maintains voice communication with the XO when the Cdr is absent.

**Battalion Staff (S1,2,3,4):** Makes contact to receive vital information on location and status of units so that the UMT can respond to local unit needs and is able to move to the units in a timely manner.

**Brigade Chaplain:** To coordinate and update the Bde Chaplain on the UMT religious support activities and status of equipment and ecclesiastical items. Also, UMT coordinates with the Brigade Chaplain about UMT replacements (specially chaplain).

**Battalion Aid Station:** To receive information concerning mass casualties, casualty flow and coordinate to provide them religious support.

**Brigade Field Hospital:** Make communication contact with Field Hospital as to the status of soldiers from the Bn and to receive data on casualties so that minimum essential religious support to include rites, sacraments, and ordinances is provided to the soldiers.



4. CONCLUSION. As indicated by these figures and justifications, communication is a critical part of the religious support mission. The UMT must be able to coordinate religious support to accomplish the mission effectively. However, to coordinate effectively, the UMT must be able to communicate with the appropriate element which requires compatible/mobile means of communication. Without the appropriate means, the UMT loses the agility and timely synchronization necessary to perform its mission effectively.

**APPENDIX G**  
**AVAILABLE EQUIPMENT AND TRANSPORTATION MEANS**

**1. COMMUNICATION AND TRANSPORTATION COMPOSITION.**

a. The purpose of this appendix is to provide an overview of the transportation and communication systems in the Army with a special focus on the equipment applicable to the Religious Support Mission.

b. Merely listing the types of vehicles and communication systems available is inadequate. An evaluation which analyzes the capabilities, limitations, and operational characteristics of the equipment is necessary. This analysis will help understand the Army's communication and transportation architecture at various echelons on the battlefield.

**2. COMMUNICATION OVERVIEW.**

a. Communications is the means for the commander and his staff to distribute critical information between higher, lower, adjacent, combined, and joint forces. On the battlefield, critical information transfer requirements exist at each echelon. Voice traffic and data distribution are the primary methods of passing this information.

b. The following sections discuss the voice and data systems in the Army and the subsystems/devices within each system which may facilitate the Religious Support Missions.

**3. COMMUNICATION ARCHITECTURE.**

a. The architecture of the operational/tactical communications is divided into three distinct systems:

- (1) Combat Net Radio (CNR) System
- (2) Army Data Distribution System (ADDS)
- (3) Area Common-User System (ACUS)

b. These three systems work together to produce the evolving communications architecture. None of these major systems alone can support the complete needs of the AirLand Battle (ALB). Integrated with subsystems and devices, they provide the capabilities to meet the requirements for information transfer on the battlefield. The following sections discuss each of these three communication systems and their potential for the Religious Support Mission on the ALB.

- (1) COMBAT NET RADIO SYSTEM

(a) The Combat Net Radio covers a broad spectrum of single-channel radios and subsystems which provide immediate Command and Control (C2) voice communications. The current CNR architecture consists of:

- Very high frequency-frequency modulated (VHF-FM) radios
- High frequency-amplitude modulated (HF-AM) radios
- Radio teletype systems
- Ultra high frequency single-channel tactical satellite systems (UHF-TACSAT).

(b) Figure 12 provides a list of the main features, strong and weak points of these radios.

MAIN FEATURES	STRONG POINTS	Weak Points
Wireless	Great Distance	Subject to Interference
Mobile	Minimum Manpower	Least Secured Means of Commo
Fast Transfer		

Figure 12  
RADIO COMMUNICATIONS FEATURES

(c) UMT Applicability: Figure 13 provides a matrix which compares radios on the basis of availability to determine the most applicable for the Religious Support Mission. The VHF-FM is the primary means (most widely available) of communication used by units operating within 20 km of enemy forces. It provides voice and wireless communication which together with the availability criteria make the VHF-FM manpack and vehicle mounted radios applicable to the Religious Support Mission in maneuver units.

COMMUNICATION MEANS				
SYSTEM	AVAILABLE	SECURE	RANGE	MOBILE
UHF	NO	YES	NLOS	MANPACK
VHF/FM	YES	SOME	LOS	MANPACK
HF/SSB	NO	SOME	LOS	TRUCK
RATT	NO	YES	LOS	MANPACK
				TRUCK

Figure 13  
AVAILABILITY OF SYSTEMS

(d) **New Developments:** Within the last five years the Communications and Electronic Command (CECOM) designed improved CNR to meet the requirements of speed, reliability and security, all of which are of critical importance to the Religious Support Mission. This system is composed of two radios:

-The Improved High Frequency Radio (IHFR) (not applicable to the UMT because of it's limited authorization)

-The Sigle-channel Ground and Airborne Radio System (SINGARS) (applicable to the UMT because it is intended to replac the current generation of VHF/FM radios available).

(e) IHFR was developed to replace the High Frequency Single Side Band Radio. These radios are extremely limited.

(f) SINGARS is the new family of VHF-FM combat net radios. SINGARS family of radios includes a total of eight different types. Of these the most applicable for the UMT is:

-The AN/PRC-119 manpack (fig 14) which replaces the AN/VRC-78.

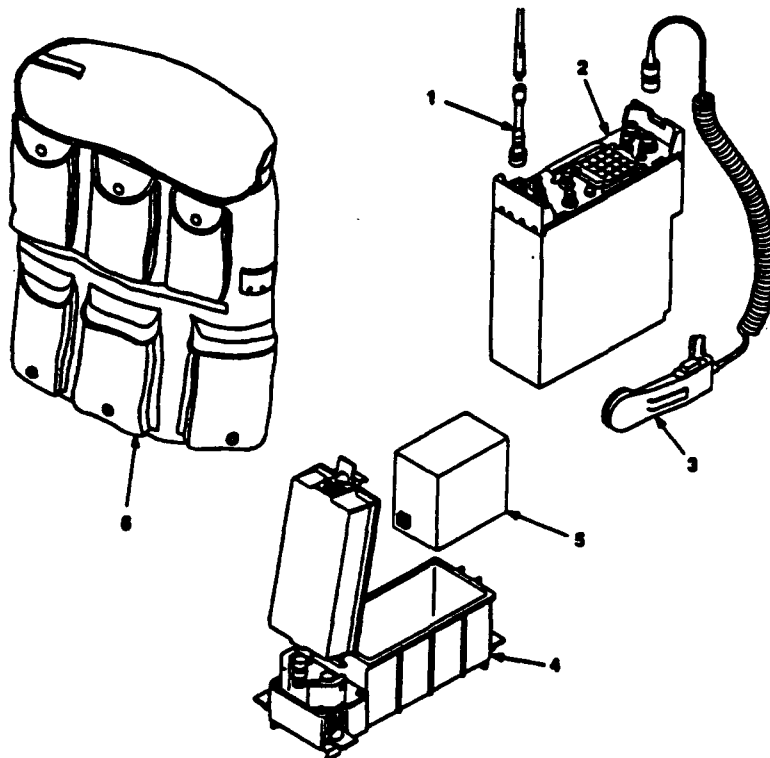


Figure 14  
AN/PRC-119 Manpack Radio

-The ANV RC-87 vehicular short range (fig 15) which replaces AN/VRC-64.

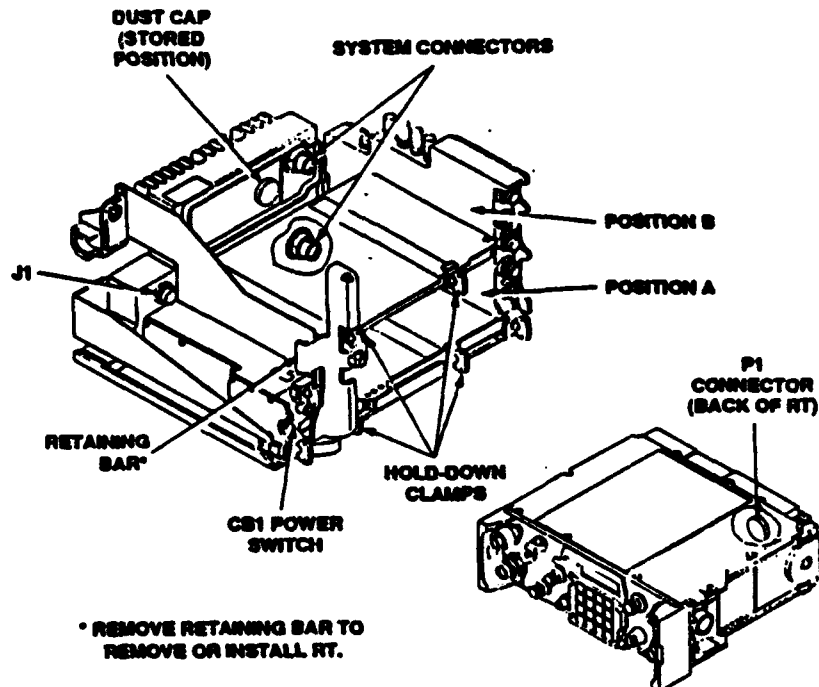


Figure 15  
ANV RC-87 VEHICULAR SHORT RANGE

(g) Both of these radios are intended to replace the current generation of VHF/FM radios.

(h) Additional key elements of the command and control communications architecture are the Tactical Record Traffic System (TRTS) and terminal devices. Terminal devices include the Battlefield Automation System (BAS), telephones, facsimiles, and similar types of equipment. These devices (except for the telephone) would not be authorized for the UMT.

## (2) Army Data Distribution System

(a) The ADDS is an integrated C2 communications system providing transmission capabilities to support high-volume data networks. Additionally, it provides precise position, location, navigation, identification, and reporting information for units on the battlefield.

(b) Examples of ADDS subsystems are:

- The Joint Tactical information Distribution System (JTIDS)
- The Enhance Position Location Reporting System (EPLARS)

### (3) Area Common User System

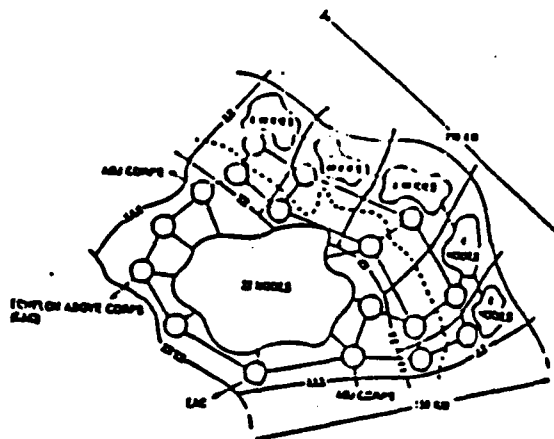
(b) The ACUS is a series of nodal switching centers connected primarily by a terrestrial line of sight (LOS) multichannel radio system. The present communication equipment authorized for the UMT is a TA312/PT field telephone set (fig 16) which connects through land line to a local switchboard and integrates through the multichannel system into the ACUS.



(c) **New Developments:** Identified shortcomings in the present systems and increasing requirements for communication and interphase, have resulted in the development of Mobile Subscriber Equipment (MSE) for corps and below. These new developments provide the following advantages over the equipment it replaces:

- Expand the number of area signal nodes in the grid network
- Service a larger community of subscribers
- Increase network mobility
- Add mobile telephone service for selected users (MSE Only)
- Provide faster service

(d) MSE enables common-user voice and data communications from the corps rear boundary forward to the division maneuver battalion's main CP (down to about 15 km from the line of battle) fig 17. According to the Program Manager's Office at CECOM, MSE will be fielded to all five active corps and their associated National Guard and Reserve units by the end of FY 93.



MSE DEPLOYMENT - 42 NODES  
-4 Nodes per division  
-22 Nodes per corps

Figure. 17

Mobile Subscriber Equipment (MSE)

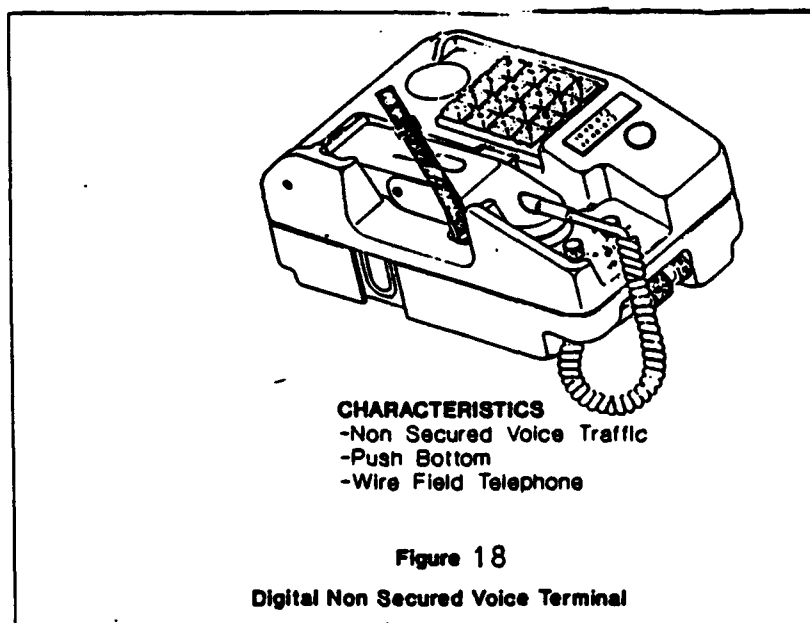
(e) UMT Applicability: MSE is applicable to the Religious Support Mission in a number of ways. There are two devices that connect to the MSE system:

-The Digital Non Secured Voice Terminal (DNVT)

-The Mobile Subscriber Radio Terminal (MSRT).

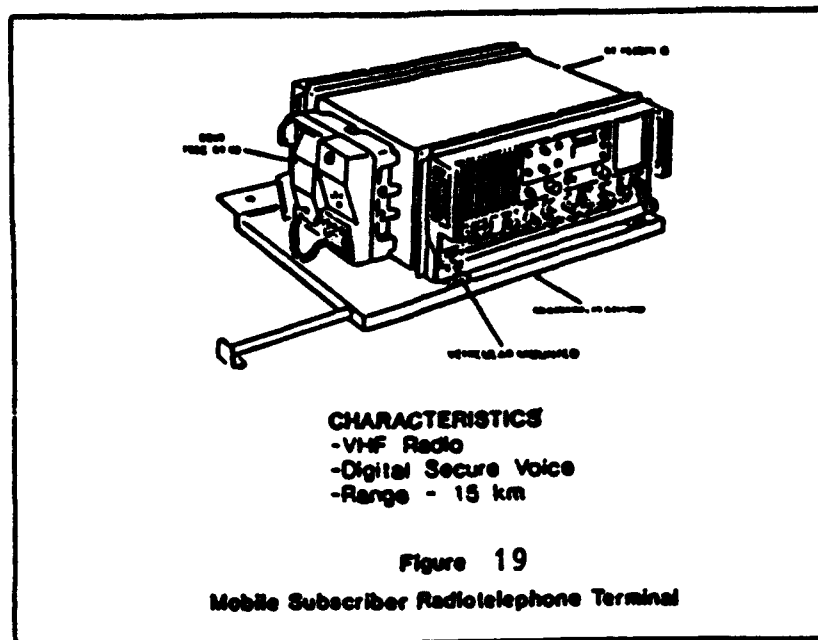
(f) Both devices meet the availability requirement for the UMT and could provide an effective combination of stationary and wireless communication. The following sections will explain each of these devices.

-DNVT is a telephone set installed by laying field wire to a local distribution point that connects to the local extension switchboard and integrates through the Multichannel system into the ACUS. This device provides for stationary communication only. DNVT will replace the TA312/PT field telephone set presently authorized for UMTs. Figure 18 presents the characteristics of the DNVT.



-MSRT is a wireless mobile telephone which gives the user direct access into the ACUS. A subscriber maintains an assigned telephone number and can be located anywhere on the battlefield. This equipment also provides for the fluid mobile environment required by ALB doctrine. Figure 19 gives the characteristics of the MSRT.





**4. CONCLUSION.** From the communication equipment in the preceding sections the following radios/devices furnish the most applicable alternative which may facilitate the Religious Support Mission:

- The VHF-FM SINCGARS family of radios (specially for UMTs in maneuver units within 20 km of enemy forces.)

- The MSE system which includes MSRT/DNVT (for UMTs in units from maneuver battalion's main CP to the corps rear boundary.)

#### **5. TRANSPORTATION OVERVIEW.**

a. In relationship to transportation the study is concerned with the following key terms:

(1) **Operational functions vehicles:** These are vehicles used specifically for an operational function. Examples of operational functions vehicle are; communication vehicles, S2 reconnaissance vehicles, and liaison vehicles. For more information on this term, refer to AR 71-13, p. 34, para (12) (e).

(2) **Staff transport vehicles:** These are vehicles used for transportation of staff section chief (CofS, XO, S1, S2, S3, S4, chaplain, etc.), assistant staff officers, administrative functions of staff sections, and transportation for section personnel and equipment.

b. The Army Tactical Wheel Vehicle (TWV) fleets provide the backbone in the warfighting support and sustainment structure.

Light, medium and heavy fleets provide the capability to transport personnel, munitions, replacement combat vehicles, petroleum products, critical supply, and combat casualties. Trucks also serve as platforms for forward command & control (C2) systems and selected weapons systems.

## **6. TRANSPORTATION ARCHITECTURE.**

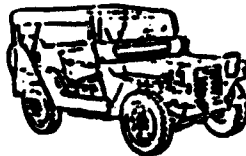
a. The current TWV fleet consists of 335,822 on hand assets. The total fleet is divided into three levels as follows:

- (1) Light (49% of total fleet)
  - High Mobility Multipurpose Wheeled Vehicle (HUMMWV)
  - Commercial Utility Cargo Vehicle (CUCV), M880, M561 and M151
- (2) Medium (42% of total fleet)
  - Light Medium Tactical Vehicles (LMTV) 2.5 Ton payload
  - Medium Tactical Vehicles (MTV) 5 Ton payload
- (3) Heavy (9% of total fleet)
  - Heavy Expanded Mobility Tactical Truck (HEMTT)
  - Heavy Equipment Transporter (HET), GOER, M915, line haul tractor).

### **b. Determining Requirements**

(1) Specific unit TWV requirements are determined by a combination of factors. In developing a unit's TOE the primary determinant is the mission the unit is expected to perform on the battlefield. Other factors considered in developing a TOE are the mobility requirements, location on the battlefield, and weapons systems supported.

(2) Because UMTs are embedded in units at all echelons, these factors will vary (except for the mission) according to their unit of assignment. UMTs are normally authorized a TWV in the TOE per authorized chaplain (AR 71-13). This authorization calls for one of the vehicles within the light fleet, normally a Truck Utility, 1/4 Ton (Jeep, M151A2, figure 20).



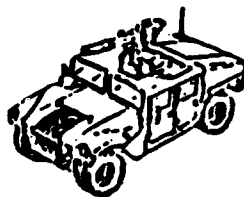
**CHARACTERISTICS**  
 -1/4 Ton Payload  
 -Manual Transmission  
 -Gasoline Powered  
 -4x4

**Figure 20**

**Truck Utility, 1/4 Ton (Jeep)**

(3) In the L series Table of Organization and Equipment (TOE) these vehicles are being replaced by:

(a) HMMWV (FIG 21) in maneuver units.

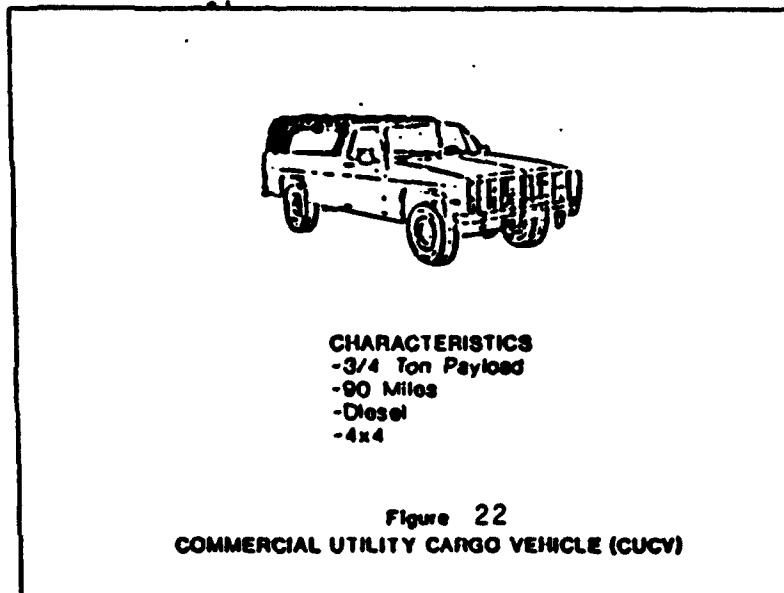


**CHARACTERISTICS**  
 -5/4 ton Payload  
 -60 mph  
 -Diesel  
 -4x4

**Figure 21**

**HIGH MOBILITY MULTIPURPOSE  
 WHEELED VEHICLE (HMMWV)**

(b) CUCV (FIG 22) at all others echelons.



(4) The Tactical Wheel Vehicle Study currently underway will provide the Army leadership with the necessary data to determine by FY 95 if the CUCV will remain in the inventory or be replaced by the HMMWV.

#### 7. CONCLUSION.

According to mission and mobility requirements the most applicable transportation alternatives for the Religious Support Mission are:

- The HMMWV in maneuver units
- The CUCV at all other echelons (if it remains in the inventory).

## APPENDIX H ESSENTIAL ELEMENTS OF ANALYSIS

1. How does the threat impact the UMT communication and transportation needs?

a. The UMT is embedded in different types of units at echelons from battalion through theater. Therefore, the UMT is exposed to the same level of threat as other staff elements in its unit. However, because the religious support mission requires the UMT to travel extensively, the level of threat increases to greater levels than if the UMT remains static as other staff sections do.

b. As the UMT travels in its assigned vehicle with no radio, it is unable to perform a number of tasks which could help overcome threat. Among these tasks are:

(1) Monitor friendly units and enemy locations. This task provides the UMT with information about the flow of the battle. This information could:

(a) Prevent the UMT from entering areas which have turned red, due to enemy occupation or NBC contamination, while the UMT was in route.

(b) Stay in contact with the S-1. This would provide information about NBC attacks, enemy movement, last minute changes, casualty flow, and other emergency needs. Having this information enables the UMT to direct its energy toward the most needed areas, therefore preventing unnecessary travel. Also, contact with the S-1 allows for a source of information about the UMT schedule.

(2) Provide intelligence information. Since the UMT travels extensively, it is likely to come in contact with critical information about enemy forces (size, location, type, etc.).

c. Although communication and transportation equipment will not eliminate the threat, it will aid the UMT by keeping it aware of the battlefield conditions.

2. What are the missions of the UMT on the ALB?

a. The primary mission of the UMT is to provide comprehensive religious support to soldiers and other authorized personnel. The UMT also furnishes advice to the commander to include information on soldier problems, religious support, indigenous religions, battle fatigue ministry, and pastoral counseling.

b. The priorities of religious support are: nurture the living, care for casualties, and honor the dead. Before engagement, the UMT nurtures the living through site visitations, pastoral counseling and individual and group worship experiences conducted in the rear or assembly areas. During engagement or combat the UMT cares for casualties and performs religious rites, sacraments, ordinances, and pastoral care for wounded soldiers. After engagement or during lulls in combat, the UMT honors the dead and consoles the living through appropriate rites, ordinances, and ceremonies.

c. The UMT has two religious support functions: direct religious support (DRS) and general religious support (GRS). DRS is the religious support provided to the members of the unit to which the UMT is assigned. GRS is the religious support provided to members of units other than the UMT's unit of assignment. GRS includes performing or providing denominational support to specific faith groups. (See FM 16-1 for additional information.)

3. How do the missions of the UMT determine communication and transportation requirements?

a. The UMT is the primary vehicle to deliver religious support to the soldier on the battlefield. In doing this the UMT must be able to reach the soldier to provide what is called "Ministry of Presence". This means that the UMT must go where the soldiers live, work, and fight.

b. Therefore, to provide effective religious support, the UMT must have mobility and communication. Transportation allows the UMT to move to where the soldiers are. Possession of communication means allows the UMT to coordinate religious support, be aware of emergency ministrations needs, and provide appropriate reports to supervisory channels more effectively.

4. What essential information must be transferred to and from UMT in terms of quantity, priority, classification, perishability/speed of service required, type, and frequency?

See Appendix C

5. Who is the UMT sender and receiver of information?

a. Both members of the UMT send and receive information. However, when the UMT is static, the chaplain assistant becomes the primary operator. While driving in a combat situation, the chaplain becomes the driver while the assistant provides security and becomes the primary operator as well.

b. Therefore, since both members of the UMT operate the radio, they must be proficient in the use of communication equipment and SOI.

6. How will the UMT deliver religious support on the ALB?

Delivering religious support on the battlefield will be very demanding on the UMT. The religious support requirements are not limited to specific places, other than to "where the soldiers are." The UMT must bring the religious support to the soldier. Therefore, for the UMT to deliver effective religious support, transportation and communication means must be available.

7. How does dedicated transportation and communication equipment impact the UMT ability to perform their mission to standard?

As reflected by the field test, the UMT's ability to perform its mission to standard is enhanced by better use of time if communication and transportation are available.

8. What dedicated communication and transportation equipment is authorized in TOEs?

The UMT is authorized a TA 312 field telephone which will be replaced by the Digital Non-secured Voice Terminal under the MSE. The UMT is also authorized a staff vehicle as stated in AR 71-13. This authorization is especially noticeable in TO&Es where the UMT is listed as a separate section.

9. What are the limitations and how compatible are the UMT transportation and communication equipment on the battlefield?

a. The transportation assets authorized the UMT varies, depending upon the echelon to which it is assigned. The UMT vehicle must be compatible with other staff section vehicles. Compatibility has been a problem where the UMT vehicle uses gasoline and the only fuel available is diesel.

b. The communication equipment authorized for the UMT provides for static communication only. Therefore, it does not provide any communication for the UMT while on the move.

10. What type transportation and communication equipment have the UMT used in the past?

The UMT has used any means available to ensure the success of the religious support mission. Since the beginning of the chaplaincy the chaplains traveled on horses, boats, trains, foot, jeeps, trucks, and air. They communicated through distribution, personal contact, messenger, telephone, and radio. (See Chapter 4 for more information)

11. How does the commander's need to communicate with the UMT affect transportation communication requirements?

Direct communication between the UMT and the commander is

very limited. However, the UMT communicates frequently with the executive officer and other staff officers. These officers do not have access to the UMT while enroute. With dedicated vehicle and communication equipment, the UMT is in a better position to respond to the requirements of the commander.

12. What transportation and communication equipment does the UMT require to provide effective religious support in a battlefield environment as portrayed in the LOGCEN Notional Corps Laydown (e.g., unit dispersion and types)?

a. For the UMT to cover effectively all units in a battlefield environment as portrayed by the LOGCEN Notional Corps Laydown, it requires:

- (1) Organic transportation as authorized by AR 71-13.
- (2) Organic mobile communication equipment to:
  - Coordinate and arrange religious support
  - Communicate while enroute
  - Be accessible to the commander
  - Be advised of contaminated areas
  - And provide intelligence information if any

b. As stated in Appendix H, the UMT should be provided with a VHF-FM SINGARS especially UMTs in maneuver units within 20 km of enemy forces. The MSE system which includes MSRT/MSE for UMTs is critical in units from maneuver battalion's main CP to the corps rear boundary. According to mission and mobility requirements, the most applicable transportation alternatives for the religious support mission are the HMMWV in maneuver units, or the CUCV at all other echelons if it remains in the inventory.

13. How does Army doctrine impact the UMT communication and transportation requirements?

The requirements of the Forward Thrust Army Doctrine require the UMT to move forward to provide religious support to the deployed elements. This requirement places great emphasis on being where the soldiers are which requires mobility and coordination. Therefore, transportation and communication must be available to the UMT to perform according to Doctrine.

14. How do the requirements of this study relate to the Battlefield Operating System (BOS)?

IAW TRADOC PAM 11-9, religious support is a sub-function under the Combat Service Support BOS. It is integral to the provision of Personnel Service Support (PSS).

15. What are the opportunities, limitations and availability of using non-dedicated communication equipment?



a. Non-dedicated communication equipment is available at the CP, the BN medical aid station and any other user with whom the UMT comes in contact. However, past experience shows that even these means are not available to the UMT during the battle phase. It is during this phase when the UMT needs to be available and aware of battlefield conditions to provide emergency ministrations as required.

b. Additionally, this equipment does not provide for communication while enroute to a new location unless the UMT follows another vehicle which has a radio. Therefore, although it is available, the UMT can not depend on this type of communication support if it is expected to provide effective religious support.

16. What are the implications of this study for changes in doctrine, organization, training, leader development, and materiel?

a. Doctrine. Clearly define the needs of the UMT in FM 16-1. Emphasize the responsibility of the UMT as well as that of the commander in the areas of communication and transportation.

b. Organization. None

c. Training. Emphasize the need to incorporate new technology in branch schools, i.e. MSE system, SINCGAR, Etc.

d. Leader Development. None

e. Materiel. UMTs at all echelons would be assigned a dedicated, mission essential vehicle. VHF-FM voice communication should be assigned to the UMT section equipment on the appropriate TOEs.

## **APPENDIX I EMERGING DOCTRINE**

1. Purpose. The purpose of this appendix is to investigate current Army doctrinal initiatives and their impact upon the Unit Ministry Team (UMT) communication and transportation requirements.

2. Background: TRADOC PAM 525-5, AirLand Operations, 1 August 1991.

b. Future War Fighting Concept reflects the following characteristics of the Army of the 1990s:

(1) Significant resources constraint; reducing the current corps size of 175,000 to 145,000 soldiers

(2) New and emerging technology in surveillance equipment/weaponry providing near real-time threat information

(3) Accurate targeting technologies and new weaponry with "smart munitions" to produce long range fires to engage the enemy at long distances

(4) Communications capability over longer distances

3. Significant Features (see Fig. 13).

a. Non-linear. The battlefield will no longer be conceived only in a linear, echeloned manner. It will be divided into zones or areas and more than double the size of the linear battlefield.

b. Near real-time threat data. Satellite, airborne, ground, robotic, and other sophisticated surveillance means will provide near or real-time accurate targeting data for military decision-makers.

c. Weapons of new and emerging technologies use "smart munitions" to produce long range fires with deadly accuracy. These fires "condition" the enemy for maneuver forces engagements.

d. An enlarged battlefield which may be divided into areas rather than terrain with distinct boundaries.

4. Command and Control (C2).

a. The corps commander plans and commands the corps battle. The division commanders fight the battle with brigade units tailored by the corps commander. The brigades quickly mass from the dispersion area to the battle zone to finish the destruction of forces.

b. **Brigade Based Divisions.** The division commander is the tactical commander. Though each brigade retains an FSB and DS FA Bn, the divisional CS and CSS functions have been eliminated or moved to corps or brigade, thus "unhinging" the division commander from logistical concerns. This effectively eliminates a division rear.

c. **Tailoring or Task Forcing the maneuver units.** The corps commander determines the type and number of brigades needed to destroy the enemy force.

**5. CSS Nondivisional Operational Concepts.**

a. To free the maneuver commander of logistics concerns in pursuing the battle, forward support battalions (FSB) and Corps Support Command (COSCOM) units will project support forward as needed based on mission, time and distance.

b. During recovery operations, force endurance is a predominant concern with the bulk of sustainment support being pushed forward from the rear of the corps sector. Reconstitution capability will be a cornerstone of the corps' ability to sustain operations after the initial battle.

c. The COSCOM is the focal point for logistics sustainment and will support the corps on a horizontal support basis through assigned Corps Support Groups (CSG), a medical brigade, and an aviation maintenance group.

**6. Corps nondivisional soldiers in the divisional area.**

a. Many CS and CSS divisional units and functions have been moved to corps level:

- Aviation logistics;

- Medical Operations;

- Maintenance through the battalion maintenance system (BMS);

- Supply and services.

b. **Logistics command and control (LOG C2) initiative.** Just as the corps becomes the focal point for the tactical fight, the COSCOM becomes the focal point for logistical sustainment. Through the multifunctional CSB the support group anticipates future logistical needs and projects support forward during all battle phases and reinforces FSBs during the maneuver phase.

c. **Religious Support in Support Unit Ministry Teams (UMT).**

(1) UMTs assigned to the CSB will find elements and detachments constantly on the move, but as an operational principle, UMTs will provide DRS to their companies and detachments, as appropriate. Therefore, to provide effective religious support, organic communication and transportation is necessary.

(2) Communication capabilities will play an important role as the CSG staff UMT monitors and plans religious support and supervises subordinate UMTs.

(3) The COSCOM UMT's responsibilities will change a little from the ALB doctrine.

d. The corps signal, engineer, air defense, military intelligence, and other corps units will be deployed forward and dispersed throughout the corps sector. By TOE, these units have only brigade UMT authorized which creates a religious support shortfall in a most lethal portion of the battlefield. Some of the implications are:

(1) Some religious support may be provided by coordinating with divisional UMTs in the area; however, many of these units will be isolated and detached throughout the area, greatly complicating adequate coverage.

(2) In this situation, only UMTs with transportation and communication equipment will be able to reach these soldiers and overcome the problems of distance, mobility, coordination and threat. In many situations helicopter transportation may be critical for an adequate attempt to cover these important units.

#### 7. Implications on Divisional Religious Support (Heavy Division).

a. The enlargement of the maneuver brigade UMT's responsibilities.

(1) The FSB will increase to approximately 1125 strength. The following implications are results of this increase:

(a) Close coordination between BDE UMT and FSB UMT will be essential to cover these highly dispersed forces.

(b) Transportation and communication equipment will be essential to accomplish effectively the coordination required to ensure effective religious support. UMTs may depend on communication more than ever to respond effectively to the mission requirements.

(2) With the elimination of the division rear, the roles and positions of the DISCOM and DIVARTY UMTs are currently being discussed. If these positions were eliminated, there would be a consequent focus of some of their responsibilities on the maneuver brigade UMT, thus increasing the coordination load on this UMT. Coordination and workload at the maneuver brigade UMT would demand effective means of communication and transportation.

b. The Division Base Battalion. A division base battalion, which includes the command group, has been proposed. A UMT (chaplain 0-3, chaplain assistant E-5) has been proposed to cover the division base battalion which will include two maintenance companies (GS), a medical company, chemical company, and attachments which total over 1000 soldiers. Transportation and communication means must be available to this UMT to provide effectively religious support to these soldiers.

#### 8. Overall Principles of Religious Support.

a. Key conceptual principles: flexibility, resourcefulness, ingenuity, creativity, responsiveness.

(1) Maintain "habitual support" with unit. Doing a good job in a unit has a residual effect in the way units respond to any UMT.

(2) Wide dispersion of units and task forcing mitigate against the significance of the habitual support bonus to ministry. To preserve habitual support to dispersed units it demands the means of coordination and mobility - communication and transportation. This is particularly true for CSS nondivisional units.

#### b. Essential Areas of Knowledge.

(1) Intimate knowledge of UMT's own unit mission - How will it function on the battlefield?

(2) Movement Control Center - Coordinate with the MCC about information on convoy movement, road clearance, airlift support available, and other transportation matters. (3) Security procedures (communication security) - Be aware of communication security procedures. All operational communication means should be secure.

(4) Communication procedures - How to use radio equipment; How to read the CEOI; Know how not to endanger units by giving away unit locations or other classified information.

#### c. Transportation.

(1) UMTs may function independently for extended periods

over large expanded territory with communication lines disrupted.

(2) Priority should be travel in convoys to reduce the threat against UMT while traveling on the battlefield. However, there will be times when the UMT must travel independently increasing the need for coordination procedures.

9. Overall implications on the UMT transportation and communication requirements.

a. Whereas the dispersion area may be fairly safe from enemy long range fires, any movement in the battle zone will be over extended lines of communication (LOC) in potentially unoccupied or uncontrolled terrain.

b. Dispersion of units throughout the battlefield will require close coordination between UMTs to ensure general as well as denominational religious support. Availability of the UMT will be a critical criteria to responding to emergency situations and properly coordinating services with other UMTs and units. Organic and mobile communication equipment would provide the UMT with the necessary means to be readily available.

c. Mobility will be an extremely important criteria for the UMT to be effective in performing its mission. Although travel liberty for maneuver UMTs during maneuver phase may be extremely limited, it is expected that without dedicated transportation the UMT will be severely limited in the performance of its mission.

d. The following are possible consequences for the UMT in future concepts:

(1) Demanding close relationships and coordination with the S-3 and movement control center (MCC) for route planning to unit locations.

(2) May result in periods of mission frustration when UMTs must be resigned to periods of isolation or minimal movement.

(3) Increased use of helicopter support which may split the UMT because of lack of space.

(4) May require the UMT to make many more communications in order to coordinate religious support and stay abreast of battlefield condition.

(5) UMTs must become familiar with radio communication equipment (MSE, SINCGARS) procedures and use the equipment on the battlefield.

(6) Survivability methods - how to comouflage and hide;

how not to endanger units by giving away unit locations, etc.

(7) UMTs must have general understanding of battlefield systems including:

(a) Movement management system including route plotting and approval procedures.

(b) Terrain Management. How to find out where units are located.

#### 10. Conclusion.

a. Future operations present new challenges to the UMTs in the way they perform the religious support mission. The UMT must become familiar with these challenges, identify weak areas, and train to become proficient.

b. With an area twice as large to cover, the UMT must carefully and efficiently use communication equipment and transportation to coordinate and bring religious support to the soldier. Having dedicated communication will give the UMT the leading edge to stay above mission requirements.

**APPENDIX J  
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**UNCLASSIFIED**

**ACN 07398**

**Unit Ministry Team  
Communication And Transportation Requirements  
On The Airland Battlefield**

**FINAL REPORT**

**DEPARTMENT OF THE ARMY  
UNITED STATES ARMY CHAPLAIN CENTER AND SCHOOL  
FORT MONMOUTH, NEW JERSEY 07703-5612**

**DIRECTORATE OF COMBAT DEVELOPMENTS**

**UNCLASSIFIED**